

DEMOGRAPHIC CHARACTERISTICS
OF WISCONSIN'S
WELFARE RECIPIENTS

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DEMOGRAPHIC CHARACTERISTICS OF WISCONSIN'S
WELFARE RECIPIENTS

SUMMARY

The Aid to Families with Dependent Children (AFDC), Food Stamp (FS), and Medicaid (MA) programs affect a sizeable number of individuals and families within the United States in general, and Wisconsin in particular. However, knowledge of the sheer numbers of people and dollars involved provides an incomplete picture of these welfare programs. The social researcher, policy planner, and government administrator must also have an understanding of who is at risk of utilizing welfare as well as comprehending the differences and similarities among recipients of various welfare programs. Such knowledge may provide insight into the present and future implications of policy changes. The purpose of this report is therefore to provide a detailed analysis of the demographic characteristics of the recipients in the AFDC, Food Stamp, and/or Medicaid programs, and differences and/or similarities among recipients in these various programs and program combinations.

A two percent random sample was drawn of all Wisconsin households receiving income or in-kind payments from one or more of the three welfare programs as of July 31, 1981. The total number of cases in the three programs during July 1981 was 176,072--resulting in a sample size

of 3,587 case heads (or households). A total of 10,393 individuals were included in the sample--representing all persons who were listed on the welfare application forms as present in the households.

Using this two percent sample data in conjunction with the 1980 Census counts for Wisconsin, we found that those most likely to be receiving income or in-kind transfers are individuals who are: (1) female; (2) black; (3) children and young adults in their 20s; (4) residing in Milwaukee county; and (5) female heads of households composed of two or more individuals. Furthermore, black women in their 20s (along with their children) have very high participation rates. We estimate that the percentage of the population in Wisconsin receiving AFDC, FS, and/or MA is the following: (1) 9.3 percent overall; (2) 10.7 percent of females; (3) 45.2 percent of blacks; (4) 19.2 percent of children under the age of 5; (5) 13.4 percent of Milwaukee County residents; (6) 49.9 percent of female heads of households composed of two or more individuals; (7) over 60 percent of black women aged 20 to 29; and (8) more than 65 percent of black children under the age of 10. While our findings are consistent with previous research, the magnitude of the percentages may be surprising. Clearly, particular demographic characteristics are strongly associated with the likelihood of receiving aid designed for low income families.

Also examined were the differences and similarities among five program combinations: (1) AFDC/FS/MA; (2) AFDC/MA; (3) FS; (4) FS/MA; and (5) MA. Both AFDC groups were characterized by two generation households, often headed by a female in her 20s or 30s, and containing several children.

Households receiving only food stamps were primarily one-generational with no children present. Often these households contained one individual, of which a sizeable number were males. In addition, FS case heads tended to be somewhat older than the AFDC case heads. Households receiving FS/MA were equally divided between one and two generation structures. FS/MA households were primarily composed of one person households, married couple families, or female householders with no husband present. MA recipients tended to live alone or in a nursing home, were elderly, often incapacitated, and were either widowed or never married. In all programs the majority of the caseload was white. In addition, recipients in all program combinations possessed low levels of education and income, and were primarily unemployed.

INTRODUCTION

Today, as in the past, individuals and families face numerous obstacles and problems during the life cycle. Indeed, it is difficult to page through a newspaper without finding some reference to unemployment, the divorce rate, domestic violence, and a multitude of other conditions which place strains on both the family and the individual. The 1970 and 1980 Censuses leave little doubt that the family has been undergoing rapid change, resulting in potential sources of strain. For example, the growing number of female-headed households often face considerable economic hardship and, at times, poverty.

It is perhaps living under poverty conditions which creates the greatest amount of stress for the individual as well as the family. Impoverished families have "the highest rates of divorce, psychoses, and physical disabilities; the least amount of dental and health care; the largest proportion of people on public welfare; the largest number of children; the highest rates of venereal disease; the most unemployment; and, as perceived by many middle-class persons, 'the most of the worst'" (Eshleman, 1981:241). Census data indicate that in 1981, 31.8 million Americans were living below the poverty level (defined as an annual income of \$9,287 for a family of four). In other words, approximately 1 out of every 7 Americans was living under poverty conditions in 1981 (U.S. Bureau of the Census, 1983). Over the past 50 years, policy makers have asked the question, "How might these families and individuals be

best assisted?" Historically, the expansion of public assistance programs has been one of the major approaches to helping families weather such a crisis, and to assist them in reestablishing their economic independence.

Although efforts to assist the poor have existed in the United States since the 1700s (for example, Colonial America adopted the Elizabethan Poor Law of 1601), it was not until the Great Depression that public assistance programs were extensively developed on a national level. Included in Franklin Roosevelt's New Deal were the Social Security Act and the Federal Emergency Relief Act, both of which provided necessary economic relief to millions. As Trattner notes, with the Social Security Act, "the welfare state was born" (1979:237).

More recently, during the 1960s, the relatively large percentage of impoverished individuals convinced President Johnson to declare a "war on poverty." As Michael Harrington noted at the time, the number of Americans in poverty was simply unconscionable. Included in the war on poverty was the continued expansion of several public assistance programs. Since the end of World War II, government social welfare expenditures in the United States have grown rapidly. As Plotnick (1979) notes, social welfare programs grew from 35 percent of all government spending in 1950, to 56 percent in 1976. Among the factors that have influenced this rise have been, first, increasing per capita income. With increased affluence, citizens tend to upwardly revise their concept of what constitutes a minimally decent level of income (Kilpatrick, 1973). As this happens, the "amount spent on income redistribution to those with the lowest market income rises" (Plotnick, 1979:276). Second, there was a push in the 1960s for social programs. Characteristic of

this push was the above mentioned war on poverty. A third factor influencing the rise in social welfare expenditures has been the tendency for particular programs, such as social security, to grow until reaching maturity. Shifts in the population's age structure (in the case of social security), as well as extension of a program's coverage to a larger population (in the case of unemployment insurance and food stamps) are several ways in which a social program matures (Plotnick, 1979).

Furthermore, Danziger and Haveman (1981) have observed that while the 1965 federal budget could have been characterized as defense-oriented, by 1981 it clearly was oriented toward social welfare. Among the programs involved in this fiscal expansion were Aid to Families with Dependent Children (AFDC), Food Stamps (FS), and Medicaid (MA). The AFDC program has greatly expanded in recent years. From 1970 to 1980, total annual payments have increased from \$4.9 to 12.5 billion. In 1980, 10.8 million recipients were receiving AFDC, representing 3.7 million families (Social Security Administration, 1981). Likewise, the annual federal outlays for the Food Stamp program have increased from \$550 million in 1970 to \$10.6 billion in 1981. A total of 22.4 million individuals in the U.S. were receiving food stamp subsidies in 1981 (Social Security Administration, 1981). Finally, the expansion and cost of the Medicaid program have increased rapidly during the past 15 years. Indicative of this expansion is the fact that Medicaid expenditures have quadrupled between 1968 and 1976 (Davis and Schoen, 1978). Total annual costs have risen from \$6.3 billion in 1972 to \$27.3 billion in 1981. Reflected in this increase is the fact that one out of every five Americans (many of whom are children) at some point have directly benefited from Medicaid. Indeed, in 1981, 22.1 million individuals were Medicaid recipients in the United States.

Such growth in the Medicaid program is a matter of concern at both the federal and state level.

The above figures make it quite clear that the AFDC, Food Stamp, and Medicaid programs affect a sizeable number of individuals and families within the United States. However, knowledge of the sheer numbers of people and dollars involved provides at best an incomplete picture of these welfare programs. The social researcher, policy planner, and government administrator must also have an understanding of who is at risk of utilizing welfare in the general population, as well as comprehending the differences and similarities among recipients of various welfare programs. Such knowledge may provide insight into the present and future implications of policy changes.

The purpose of this report is therefore to provide a detailed analysis of: (1) the demographic characteristics of the population involved in the AFDC, Food Stamp, and/or Medicaid programs; and (2) a comparison of characteristics of recipients in these various programs and program combinations. An understanding of the population at risk, and the demographic composition of such individuals and households, will allow greater insight into the problems that face these recipients. With this understanding, the State will be in a better position to meet the challenge of equitably administering scarce welfare resources.

PROGRAM ELIGIBILITY REQUIREMENTS

The programs examined in this report vary as to coverage, intent, and eligibility, and therefore we will briefly discuss each program separately. The following descriptions pertain to the three programs as of 1981.

Aid to Families with Dependent Children Program

The Aid to Families with Dependent Children Program developed out of the Aid to Dependent Children Program which was established in 1935 under the Social Security Act. AFDC provides public assistance in order to cover the minimum costs of food, shelter, clothing and other items of daily living. It is provided on behalf of needy dependent children, generally in broken homes. Such children must be deprived of the support of at least one parent by reason of death, desertion or incapacity.¹ Benefits are paid directly to the children's parents or caretaker relatives in the form of cash, usually without restrictions on its use. Generally, payments are made monthly and in amounts varying according to each family's countable income, size and needs, as determined under state law.

Benefits are funded by formula grants to state welfare agencies. While AFDC is operated under federal legislation, it is administered by the states under a matching grant-in-aid basis, with costs borne by the federal and state entities.

Food Stamp Program

Established by the Food Stamp Act of 1964, the Food Stamp Program provides low income individuals and households with coupons redeemable for food at most retail food stores, where they are accepted at face value. The monthly value of coupons a family or individual receives is determined by household size and income. Households without income

receive the determined monthly cost of a nutritionally adequate diet for their household size. This amount is updated to account for food price increases. For example, as of January 1, 1982, an eligible four-person household with no income received \$233 monthly in food stamps.

Households with income receive the difference between the amount of a nutritionally adequate diet and 30 percent of their income, after certain allowable deductions. To qualify for the program, a household must have less than \$1,500 in disposable assets and gross income below 130 percent of the Office of Management and Budget poverty guidelines for household size.²

The program is administered nationally by the Food and Nutrition Service of the Department of Agriculture and operates through local welfare offices and the nation's food marketing and banking systems. The Federal Government, through general revenues, meets the full cost of food stamps, but Federal and State programs share administrative costs.

Medicaid Program

The Medicaid program, which was established in 1965, provides medical assistance for certain low-income individuals and families. It is financed jointly by State and Federal funds. The Federal contribution to the cost of Medicaid ranges from 50 to 77.55 percent. It is administered by each State with broad Federal requirements and guidelines.

Individuals who are currently participating in either the AFDC program or Supplemental Security Income (SSI) program for the aged, blind, and disabled automatically qualify for Medicaid. States may also provide Medicaid to the "medically needy." These include individuals who

are not covered by AFDC or SSI because their income is too high, but nevertheless do not generate enough income to finance their medical care.

Certain basic services are covered in all State Medicaid programs. These include inpatient hospital services, outpatient hospital services, laboratory and X-ray services, skilled nursing facility services for individuals aged 21 or older, home health care services for individuals eligible for skilled-nursing services, physicians' services, family planning services, rural health clinic services, and early, periodic screening, diagnosis, and treatment services for individuals under age 21.

METHODOLOGY

Since late 1980, records of several welfare programs in Wisconsin have been almost completely computerized. Wisconsin's Bureau of Economic Assistance, Department of Health and Social Services, maintains a centralized, computerized data base of all applicants for three means-tested income transfer programs: Aid to Families with Dependent Children, Food Stamps, and Medicaid. When individuals apply for an AFDC, Food Stamp, and/or Medicaid grant, the information on a combined application form is directly keyed from a county office into the centralized Computer Reporting Network (CRN). Data files are retained over time, and information is updated according to program regulations. The CRN system thus presents an ideal opportunity for studying the characteristics and changing dynamics of Wisconsin welfare recipients. Specifically, in this report, individuals in the AFDC, Food Stamp, and/or Medicaid programs are examined.

The unit of analysis in our report is the CRN case, composed of the case head and those individuals listed on the application who are

residing in the household of the case head. The CRN case therefore may include a case head only, a case head and spouse, a case head and children, a three generation family, or other combinations of persons making up the case household. In the present analysis we focus on: (1) characteristics of the case head; (2) characteristics of those listed as part of the welfare grant; (3) characteristics of all individuals residing in the household; and (4) the household structure.

A two percent random sample was drawn of all individuals who were currently receiving income or in-kind payments as of July 31, 1981, from one or more of the three programs in Wisconsin. The total number of cases on the CRN system in July 1981 was 176,072--resulting in a sample size of 3,587 case heads (or households). A total of 10,393 individuals were included in the sample--representing all persons who were listed on the application form as present in the household, whether eligible for assistance or not. The sample, therefore, permits an examination both at the household and at the individual level. The two percent sample was built by combining two simple random samples of one percent each. These samples were generated by randomly selecting two two-digit numbers and using these to select the last two digits of the case head's Social Security number. Further details of the sampling process and procedure for testing for randomness in the two one-percent samples are contained in Robbin, et al. (1982).

Our analysis is presented in two components. Initially, we focus on the percentage of Wisconsin residents who reside in a household receiving aid, who are part of a welfare grant, or who are case heads (applicants) of such households. We should note that virtually all case heads are also listed on the welfare grant and are residing in the household.

Similarly, nearly all individuals listed on the grant are also residing in the household. However, not all individuals residing in the household are listed on the welfare grant. For example, two families may constitute a single household with only one family eligible for AFDC, FS, and/or MA.

In the first half of this analysis, our two percent sample was first multiplied by 50 to estimate the state's total AFDC, FS, and MA population. These figures were then divided by appropriate 1980 Census figures in order to calculate the proportion of Wisconsin's population receiving aid. The Census data were used because they represent the best available numbers for computing the kinds of percentages needed for this analysis, and they are reasonably close in time to the date of our sample. The numbers are shown separately for groups by sex, race, age, county of residence, household structure, and several combinations of these variables. We are able to estimate, for example, what percentage of white females aged 20 to 24 apply for and receive aid, are listed on a welfare grant, or are residing in a household receiving aid.

Several notes of caution are necessary regarding these calculations. First, the overall 1980 state population was somewhat smaller than the 1981 population, and therefore our percentages will be slightly inflated (although the reverse may be true for some age groups). Second, the Census tends to undercount particular racial and ethnic groups, causing our percentages for blacks to be somewhat inflated as well. Third, although data are gathered for individuals on the CRN system by age, sex, county of residence, and household structure, information on race is available only for the case head. Thus, we are making the assumption in the analysis that if the case head is, for example, white, then the

individuals residing in the household are also white.³ Clearly a small amount of error will be introduced by this assumption. And finally, our calculation of household structure makes the implicit assumption that the duration of specific household types does not differ between the welfare population and the overall population. For example, we assume that single parent families receiving welfare remain in that state (i.e. one spouse present) for the same amount of time as single parent families in the overall population. Again, some amount of error will be introduced by this assumption. However, in spite of these cautions, the calculations based on this procedure are felt to be indicative of welfare utilization in Wisconsin; certainly these problems do not substantially alter the differentials reported.

The second half of the analysis focuses on the characteristics of welfare recipients by program type. For this analysis, only the two percent sample data from the CRN data base is used. Thus we examine the similarities and/or differences between individuals and households receiving AFDC, food stamps, Medicaid, and several combinations of these programs. The criteria to establish participation in the AFDC and Food Stamp programs were based on whether or not the household actually received a grant in July 1981. On the other hand, participation in the Medicaid program was determined solely on the basis of the applicant's current eligibility rather than on the receipt of an in-kind transfer payment during July 1981.⁴

RESULTS

Percentage of Wisconsin Residents Receiving AFDC, Food Stamps, and/or Medicaid

Table 1 shows the estimated percentage of the population residing in households receiving AFDC, food stamps, and/or Medicaid. The analysis is broken down by four demographic characteristics: sex; race; age; and county of residence. These percentages, as discussed earlier, are based on the inflation of our sample counts to produce estimates of the total welfare population. The true percentages may vary somewhat from these figures due to the before mentioned problems, as well as sampling error.

Looking first at the total percentage of residents classified as case heads (column 1), an estimated 3.8 percent of Wisconsin's population apply for and receive either AFDC, FS, and/or MA. However, it is clear that not all residents are equally likely to be case heads receiving welfare. For example, females (5.8 percent) are much more likely than males (1.6 percent) to be receiving aid. Likewise, 16.1 percent of blacks apply for and receive aid while the percentage for whites is 2.8 percent. Age also reveals differences in the patterns and likelihood of participating in one or more of the three transfer programs. Among Wisconsin residents aged 20 to 24, 7.9 percent are case heads of households receiving aid. The percentage slowly drops over the course of the life cycle until age 70. A very high proportion of those aged 75 and above receive aid (as we will see later this reflects Medicaid participation). Geographic residence also is related to participation.

Of Milwaukee County residents, 5.7 percent are case heads, while the corresponding percentages for other metropolitan and nonmetropolitan residents are 3.2 percent and 3.4 percent.

Turning to columns 2 and 3, the estimated percentage of individuals with particular demographic characteristics who are listed on the welfare grant (column 2), and who are residing in a household receiving aid (column 3), reveals patterns similar to those of column 1. However, one important and not altogether surprising finding (given the nature and intent of the AFDC program) is the number of children who are listed on a welfare grant or who are residing in households receiving aid. Thus, 20.5 percent of all Wisconsin children under the age of 5 are living in a home receiving either AFDC, FS, and/or MA. Similarly, 18.6 percent of youngsters aged 5 to 9, and 14.8 percent of children aged 10 to 14 are residing in households receiving income or in-kind transfers.

Table 2 extends the analysis of Table 1, by focusing on household structure. This table allows us to ask: What percentage of various types of households in the state are participating in one or more of the three transfer programs? Married-couple families are least likely to be receiving welfare. Indeed, only 4 percent of such households are receiving aid. There are several reasons for this. First, married couples often are able to generate greater income through the employment of both spouses. Second, it is usually easier for married couples to support or arrange for the care of small children (if a wife or husband is not working). On the other hand, households of two or more individuals headed by a woman have a 1 in 2 chance of receiving AFDC, FS, and/or MA.⁵ Bradbury et al. (1979) observe that in recent years there has been a rapid growth in the number of households headed by women and

in the proportion of these households receiving public assistance. Or, as Sanger notes, "when a woman with children becomes a family head, her chances of becoming poor and going on welfare greatly increase" (1979:51). Our data are consistent with this observation. Again there are several reasons that underlie this relationship. Women earn substantially less in the labor market than their male counterparts. For example, Waite (1981) estimates that for every dollar a male earns in the labor market, a female earns 59 cents. Second, many of these female householders are caring for their children and not participating in the labor force (either by choice or by their inability to find a job outside the home), which creates a greater financial burden upon such households. Thus it is no surprise that married couples and female heads of family households represent the extremes in participation percentages shown in Table 2. What may be surprising, however, is the substantial gap between these two extremes.

Tables 3, 4, and 5 further refine the analysis of Table 1. In Table 3 the breakdown by age and sex is examined. It is clear that very few men in the population are case heads (the exception being those aged 75 and over). On the other hand, women are most likely to be case heads of welfare households during their 20s and 30s, as well as after age 75. As noted earlier, the individuals most likely to be listed on a welfare grant or residing in a welfare household are children. However, the differences between the participation rates of boys and girls are slight.

The breakdown by race and sex is found in Table 4. Of white males, 1.3 percent apply for and receive aid, while 4.3 percent of all white females are case heads. On the other hand, 6 percent of black males and 25.6 percent of black females are directly receiving AFDC, FS, and/or MA

benefits. It is predominantly the black female percentage which is pulling up the overall black percentage found in Table 1. As Kilson (1981) has argued, during the 1970s the slippage of aggregate black family income relative to white family income (from 62 percent in 1975 to 57 percent in 1980) is tied directly to the extraordinary rise in black female-headed households. Kilson points out that low income and high unemployment appear endemic to black female-headed families. Our state-wide percentages highlight these difficulties. Approximately 1 out of 4 of the state's black women are case heads of families participating in one or more of the transfer programs. Undoubtedly, the major reasons for this high percentage are the low income and lack of employment opportunities facing these families. Columns 2 and 3 further exemplify these trends. Approximately one third of black men, and one half of black women are listed on an AFDC, FS, and/or MA grant, while 47 percent of the black men and 66 percent of the black women in the State are residing in households receiving one or more of these three programs.

Finally, Table 5 further refines the analysis of Tables 3 and 4 by focusing on race, sex, and age simultaneously. Consequently this table addresses the probability over the life cycle of receiving transfer payments by race and sex.⁶ Looking first at case heads, the percentage of white males receiving aid is quite low until age 50 and over (as we will demonstrate in the second half of this report, most of the elderly who are receiving welfare are in fact receiving Medicaid). For black males, those aged 20 to 24 are most likely to be receiving aid. The trend after age 24 is generally downward. Both white and black women display a similar pattern over the life cycle. However, the pattern is considerably more accentuated for black women. During their 20s, over 50

percent of black women are receiving welfare. The percentage steadily drops for successively older women.

Turning to the likelihood of whether an individual is included on a welfare grant, several striking findings are apparent from Table 5. For black children under the age of 5, we estimate that 79.9 percent of all girls and 67.3 percent of all boys in the population are included on AFDC, FS, and/or MA grants.⁷ While the percentage of white children residing in such households is considerably less, it nevertheless represents the age category with the highest percentage of individuals on welfare. Likewise, the percentage of children residing in a household receiving aid (but not necessarily on the welfare grant) also is quite high. Thus, 86.3 percent of black girls, and 77.6 percent of black boys under the age of 5 are residing in a household receiving AFDC, FS, and/or MA. For white children under the age of 5, 13.8 percent of girls and 14.5 percent of boys are residing in welfare households.

To summarize our findings, using sample data in conjunction with the 1980 Census counts, it is found that those most likely to be receiving income or in-kind transfers in Wisconsin are: (1) females; (2) blacks; (3) children and young adults in their 20s; (4) residents of a major metropolitan county; and (5) female heads of households composed of two or more individuals. Furthermore, black women in their 20s with children have very high participation rates. While our findings are consistent with previous research, the magnitude of the percentage differences may be surprising. Clearly, particular demographic characteristics are strongly associated with the likelihood of receiving aid designed for low income families.

Likewise, it is important to stress that these demographic factors are not operating in isolation from one another. For example, we find that participation rates are higher for blacks than whites. However, we also know that black families are more often headed by a woman. Similarly, black families in Wisconsin have a higher probability than white families of residing in Milwaukee County. Both of these factors are also related to the chances of participating in one or more of the three transfer programs. Consequently, we need to think of these characteristics in conjunction with one another, rather than as isolated dimensions.

Finally, it is important to examine not only the estimated percentage of the population participating in these programs, but also the estimated number of recipients. For example, although we find that the percentage of blacks who are case heads is higher than the percentage of whites who are case heads (16.1 percent versus 2.8 percent), the actual number of black case heads is much smaller than the number of white case heads (29,600 versus 125,700). Likewise, 4 percent of married-couple families are receiving AFDC, FS, and/or MA, while 50 percent of households headed by a woman are participating in one or more of these programs. However, the estimated number of married-couple families receiving welfare is 41,050, while the corresponding number for female-headed households is 67,900. Thus the difference between the numbers of participants is much less than the percentage difference in this case. The point to be made is not that one number is more appropriate than the other, but rather that both pieces of information are important, depending upon the questions being addressed.

Characteristics of Recipients in Various Program Combinations

While the preceding analysis focused on the percentage of Wisconsin residents receiving AFDC, FS, and/or MA, there was no differentiation made between these three transfer programs. We now address the characteristics of households and individuals within different programs and combinations of programs. Specifically, our focus is on five combinations: (1) AFDC/FS/MA; (2) AFDC/MA; (3) FS alone; (4) FS/MA; and (5) MA alone. These five constitute the various program combinations an individual could qualify for. There is no AFDC-only category, or AFDC/FS category, because an individual receiving AFDC automatically qualifies for Medicaid.

We will use only the two percent CRN sample in this analysis, not the total state estimates that were used in the previous section. In the tables that follow, our units of analysis are case heads, as well as all individuals residing in a household. The number of case heads, by definition, is the same as the number of households. We should note once again that not all individuals in a household are necessarily listed on the welfare grant. However, from both a demographic and sociological perspective, it was felt that the household, rather than the welfare grant unit, was the proper focus of analysis. Previous research has demonstrated that individuals within households often pool their resources regardless of whether they are included on a welfare grant or not (Stack, 1974). Thus, all individuals in the household may be a more relevant unit of analysis than only those household members who are eligible for a particular program.

Table 6 shows the distribution of both case heads and individuals by program type. The AFDC/FS/MA category is the most common program combination represented, with 37.6 percent of case heads and 47.8 percent of individuals (i.e., all household members) in this category. Individuals constitute a significantly larger proportion than do case heads because of the larger average household size that typifies AFDC households. About one quarter of the CRN case heads are on non-AFDC-related food stamp cases (see FS and FS/MA categories in Table 6). When all food stamp categories are combined (AFDC/FS/MA, FS and FS/MA), 63.2 percent of case heads and 69.4 percent of individuals are shown to be recipients of food stamp benefits. Medicaid eligibility accompanies AFDC eligibility, resulting in fully 87.6 percent of case heads and 92.1 percent of individuals in CRN households eligible for Medicaid (AFDC/FS/MA, AFDC/MA, FS/MA and MA categories). Non-AFDC-related Medicaid amounts to 36.7 percent of case heads and 26.1 percent of individuals.

We should also note that while AFDC is treated as one program throughout the analysis, there are several types of AFDC that are available to households. Table 7 illustrates this breakdown. The majority (85 percent) of households are receiving regular AFDC, that is, one parent with children. Approximately 9.4 percent of the AFDC caseload consists of AFDC-Unemployed Parent, in which both parents may be living in the household and either the father or mother is unemployed. About three percent of the AFDC caseload is comprised of AFDC-Not Legally Responsible Relative, in which a child is residing with a relative other than its parents. The remaining 2.5 percent is composed of AFDC-Maternity Care, intended for pregnant women who have no prior children.

Household Characteristics

Not all persons live in households. This is especially true of the welfare population because of the sizeable proportion of those receiving Medicaid who live in nursing homes. Table 8 shows the distribution of living arrangements by program type. For the non-Medicaid population, only a very small fraction of persons do not live in households. For the Medicaid-only group, however, three-fourths of case heads and one-half of individuals do not live in a household. In spite of this, to avoid encumbering the text of this report with frequent qualifications regarding living arrangements, we will refer to the various subgroups analyzed here as if everyone lived in a household (actually, less than one fifth of all caseheads did not live in households).

Table 9 illustrates the fact that household size clearly varies by program type. While the average household sizes for the two AFDC columns are 3.7 and 4.0 persons, households receiving only food stamps average 1.8, and households receiving only Medicaid average 1.5 persons. Households participating in both the Food Stamp and Medicaid programs fall between those extremes with an average of 3.0 persons. Turning to the percentage distributions, only a small minority of AFDC households contain one individual (such households consists almost exclusively of pregnant women). By far the majority of households receiving AFDC consist of two, three, four or five individuals. In contrast, 80.8 percent of households receiving only MA are sole individuals, many of whom are residing in nursing homes. Likewise 54.8 percent of households benefiting only from the food stamp program are one person households.

Table 10 extends the findings of Table 9 by focusing on the percentage of one, two, and three generation households. It is quite obvious that there are sharp differences among the various programs. Households receiving AFDC are dominated by a two-generation structure consisting of children and parent(s). Fully 95.4 percent of AFDC/FS/MA households and 94.0 percent of AFDC/MA households fall into such a category. On the other hand, households receiving only food stamps (column 3) or Medicaid (column 5) are predominately one generation (91.1 percent and 92.2 percent). Although 45.2 percent of FS households contain 2 or more individuals (Table 9), it is interesting that only 9.9 percent are multi-generational. Finally, FS/MA households fall between the extremes of AFDC recipients on the one hand, and FS or MA recipients on the other. Thus 50.4 percent of households receiving both food stamps and Medicaid consist of one generation, while 49.1 percent contain two generations.

Household structure by program type is further broken down in Table 11. In AFDC/FS/MA households, 95.1 percent are either female householders with no husband present (71.9 percent) or married-couple families (23.2 percent). Likewise, AFDC/MA households are dominated by these two household structures--54.8 percent for female households with no husband present, and 39.4 percent for married-couple families. On the other hand (as also indicated in Table 9), 54.8 percent of food stamp households, and 80.8 percent of MA households are one person (female or male) households. Finally, a sizeable percentage of FS/MA households are married-couple families (38.2 percent). The composition of FS/MA households clearly differs from that of FS households.

Table 12 documents the number of children by program type for female heads of household, male heads of household, and married couples. The average number of children for females receiving AFDC/FS/MA is 1.9; it is 1.6 for those receiving AFDC/MA. The stereotype of AFDC mothers having five or six children simply is not supported by these data. In fact, the average number of children for U.S. families that have any children was 1.89 in 1980 (U.S. Bureau of the Census, 1981). The national average for female-headed families was 1.87. Thus, mothers receiving AFDC in Wisconsin average slightly fewer children than the overall national average. A sizeable majority of the AFDC/FS/MA mothers have one or two children living in their household (70.7 percent), as do AFDC/MA mothers (77.0 percent). In contrast to those findings, over 90 percent of female heads receiving either FS or MA have no children residing with them.

Panel 2 of Table 12 presents a similar analysis for male heads. We can see that the number of male household heads (no spouse present) receiving AFDC is quite small. For those receiving FS, FS/MA, or MA, very few have children living with them.

Finally, the bottom panel in Table 12 focuses on number of children for married couples. Couples receiving AFDC average 2.4 children, which is larger than the averages for either female or male heads of household (in 1980 the national average number of children for married couples with offspring was 1.91). This panel also differs from the two preceding panels in that FS/MA households contain a significant number of children. Married couples, therefore, differ from male and female household heads, in that such households tend to contain a greater number of children across program combinations. This is reflected in the total averages--1.2 for female heads, 0.1 for male heads, and 2.1 for married couples.

In summary, Tables 8 through 12 illustrate that household structure clearly differs across programs. Those households receiving AFDC consist, on the average, of approximately four individuals in a two-generation structure. Furthermore, 71.9 percent of such households are headed by a female with no husband present. AFDC households headed by a female average slightly less than two children per household. Households receiving only FS average 1.8 individuals and are primarily one generation. The majority of such households contain no children. Medicaid households are similar to FS households in that both average 1.5 individuals, and are primarily one generation households containing no children. In terms of household structure, the FS/MA households fall somewhere in between the AFDC household, and the FS and MA households. Thus, FS/MA households average 3.0 individuals, are evenly divided between a one- and two-generation structure, and are primarily composed of one person households, married couple families, and female householders with no husband present. Finally, these households average more children than the FS or MA households, but less than the AFDC households.

Individual Characteristics

Geographic distribution. Geographic residence by program type is found in Table 13. As indicated in Table 1, Milwaukee County is overrepresented in the total CRN caseload, and in all program categories except MA. While Milwaukee County contains approximately 20 percent of the State's population (and approximately 22 percent of the State's households), 31 percent of the State's economic assistance households are

located in Milwaukee. The overrepresentation of Milwaukee County is particularly noteworthy for households receiving only food stamp assistance and for households eligible for all three types of program assistance.

Metropolitan counties other than Milwaukee County contain a mixture of central city residents, suburban households, and a sizeable rural population as well, with a combined total of 42 percent of the State's population. As an aggregate, this metropolitan population tends to be underrepresented except for the AFDC/MA program type.

Nonmetropolitan households are underrepresented in all categories except that of (non-AFDC-related) Medicaid. This is due largely to the fact that Wisconsin's nonmetropolitan population has an older age distribution than does its metropolitan population--a legacy of decades of outmigration of rural young adults to the State's larger urban centers as well as a recent trend for retirees to settle in selected nonmetropolitan areas having a wealth of environmental amenities. In 1980 the median ages for the metro and nonmetro sectors were 28.9 and 30.5 years, respectively. It is therefore not surprising to see the high nonmetro representation of households receiving Medicaid payments.

What may seem unusual, however, is the overall underrepresentation of economic assistance recipients in nonmetropolitan areas. In a national survey carried out by the Census Bureau in 1976, the percent of persons in Wisconsin with 1975 total money incomes at or below the official poverty level was 6.3 percent in metropolitan areas and 9.6 percent in nonmetropolitan areas (U.S. Bureau of the Census, 1976 Survey of Income and Education, computer tabulations). On this basis, it would seem likely that the nonmetropolitan sector should be more highly represented

in our tabulations. However, it may be that individuals residing in nonmetropolitan areas feel greater social sanctions against using welfare than their counterparts in metropolitan areas.

Age. Age distribution of caseheads and household members for the five program combinations are found in Table 14. Regarding case heads (Table 14, top panel), those receiving AFDC tend to be in their 20s or 30s. Indeed, 78.3 percent of AFDC/FS/MA case heads and 77.5 percent of AFDC/MA case heads fall into this age bracket. Mean ages are 30.4 and 32.5 years, respectively. On the other hand, both food stamp groups tend to be slightly older, as reflected in average ages in the late 30s. Medicaid case heads are substantially older than either the AFDC or FS groups. Over half (55.9 percent) of Medicaid case heads are age 75 or more.

When our focus is on all individuals in the households (Table 14, bottom panel), average ages are lower for all program groups because the data include children. This is especially noteworthy for both AFDC groups, where the presence of children is one criterion for program eligibility. We find a substantial percentage of the total AFDC population comprised of children under the age of 15--50.9 percent for AFDC/FS/MA and 42.6 percent for AFDC/MA.

Race. Table 15 illustrates the fact that 70 percent of the case heads participating in the three welfare programs are white. The percentages, however, vary with respect to the five program combinations. These range from 62.2 percent (AFDC/FS/MA) to 80 percent (MA). Likewise, 2 out of 3 individuals residing in a household receiving aid are white. Again, the percentages vary according to the programs under consideration.

We should note that blacks and other racial (and ethnic) minorities are represented among the State's economic assistance recipients far out of proportion to their numbers in the population generally. This point was made earlier in the discussion of Tables 1, 4, and 5. As Table 15 indicates, these minorities make up fully 30 percent of the CRN case heads and 34 percent of the individuals in households receiving economic assistance, although they constitute less than 6 percent of the State's residents.

The most common category of assistance for all three racial groups is AFDC/FS/MA (Table 16). Blacks, however, are more likely than the other two groups to be in households eligible for receiving benefits from all three programs. At the same time, blacks are considerably less likely to be found in households receiving non-AFDC-related Medicaid.

Sex. More than three-fourths of the case heads in the CRN data base are females (Table 17). This results in part because females are overwhelmingly the applicants for AFDC, and AFDC-related cases constitute approximately half of the CRN eligible case load. Only about 5 percent of AFDC applicants are males. Females also predominate in the non-AFDC-related MA program category, as well, but here the explanation is, in part, the more favorable survival rates among women. Recall that more than half of the MA-only case heads are over the age of 74 years.

Among households receiving food stamp assistance, we see an exception to the female over-representation among case heads. For the approximately 22,000 households in the state receiving only food stamp assistance, a majority of the case heads are male.

Marital Status. Only 22 percent of case heads in Wisconsin are married, with spouse present (Table 18). Again, this is indicative of

the fact that AFDC is basically directed toward non-intact families (the exception being the AFDC-U program). Overall, 33 percent of case heads have never been married, and the remaining 45 percent are either separated, divorced or widowed, with these three categories being fairly evenly represented.

The distributions on marital status within the program categories show considerable variation. The two AFDC groups differ in that there is a greater percentage of separated individuals receiving AFDC/FS/MA, while the AFDC/MA population contains nearly 4 out of 10 married (spouse present) case heads. Approximately half of the applicants receiving food stamp assistance have never been married, while 43 percent of those eligible only for Medicaid are widowed. Of those receiving FS/MA, 38.2 percent are married (spouse present), while 29.3 percent have never been married.

Education. In 1976, among Wisconsin residents 25 years of age and over, 33 percent had fewer than 12 years of schooling and 47 percent of those living in households below the official poverty level had less than 12 years of formal education. Households on the CRN system mirror the lower educational levels of persons below the official poverty level (Table 19). All program combinations averaged less than 12 years of education. The one category that particularly stands out is the very high percentage of MA-only recipients with less than 9 years of schooling. This partly reflects the older age distribution of this group--people who completed their formal education at a time when high school graduation was achieved by a much lower proportion of the population than today. Across all program categories, level of education for case heads is quite low. Only in the AFDC/MA column have more than two thirds of the case heads graduated from high school.

School Status. Table 20 illustrates that over 90 percent of case heads are not in school. However, there is a sizeable number of individuals from households receiving AFDC/FS/MA, AFDC/MA, and FS/MA who are attending school. These higher percentages reflect the presence of children in these households.

Incapacitation. Among the case heads receiving economic assistance in Wisconsin, 20 percent are incapacitated (Table 21). The state's definition of incapacitation is that an individual is unable to perform his/her typical work, due to a temporary or permanent condition, either physical or mental. For AFDC households, where the case heads are younger, on average, approximately 4 percent are incapacitated. Among MA recipients, nearly three out of five are incapacitated. The bottom panel of Table 21 focuses on incapacitation of individuals within the household. Both food stamp groups have a much higher percentage of incapacitated individuals than either AFDC categories. Again, the highest percentage of incapacitation occurs within MA households.

Employment Status. Turning to employment status of case heads (Table 22), we find that the vast majority are not employed. Only for those individuals receiving AFDC/MA is there a sizeable percentage (close to 40 percent) who are working. However, as Sanger notes, cross-sectional data tends "to underestimate grossly the importance of work to large segments of the welfare population; while at one point in time the percentage of recipients who are working might be quite low, data based upon tracking recipients over an extended period have revealed a consistently more active relationship with the labor market than could be inferred from data collected at any one point in time" (1979:18). Indeed, the work of Rein and Rainwater (1978) and AuClaire (1979) illustrate this

observation. Thus, although our sample indicates that only a small percentage of welfare recipients are employed, if we were to follow these recipients over the course of a year, a much larger percentage undoubtedly would have worked some amount of time.

Income. A similar pattern is found for gross monthly earned income (Table 23). Four out of five case heads had no earned income. The only exception again is the AFDC/MA group, where 42 percent are reported as earning income, mostly greater than 500 dollars per month. Average monthly incomes are under \$100 for all program combinations except this AFDC/MA group. Again, the observation regarding cross-sectional data and employment status is applicable to income--that is, following our sample over time would result in more case heads reporting some amount of income.

Total household income is shown in Table 23. Average household income exceeds case head income by approximately 80 percent in all program categories. AFDC/MA households again average the greatest amount of income (\$438.02) while MA households average the least (\$43.05).

Grant Size. Finally, Table 24 documents the dollar amounts of AFDC, food stamp, and combined monthly transfer payments. Medicaid payments are not included here since they are not available from the CRN data base. Table 24 reveals that 45 percent of AFDC/FS/MA households are receiving \$400-499 per month. On the other hand, 78.8 percent of AFDC/MA households receive between \$100 and \$399. The difference between the income transfers received by each AFDC group is apparent in the averages (\$420.91 versus \$254.23).

Food stamp allotments are shown in the second panel of Table 24. FS/MA households receive the greatest dollar amount of food stamps, followed by the AFDC/FS/MA and the FS households. The last panel in

Table 24 combines both AFDC and food stamp payments to arrive at a total monthly transfer amount. Again, AFDC/FS/MA households are receiving the largest average transfer payment (\$503.02).

To summarize, Tables 13 through 24 have focused on the demographic characteristics of welfare case heads and individual household residents by program type. Furthermore, we have addressed the similarities and differences in those characteristics across program combinations. While there are similarities among all five program combinations, there are also a number of differences in the demographic compositions. However, we must emphasize that the problems and conditions that face the majority of welfare recipients are most notably low levels of education, income, and employment.

CONCLUSION

This report has focused on the demographic characteristics of Wisconsin's AFDC, Food Stamp, and Medicaid recipients. Using the Computer Reporting Network (CRN) of the Wisconsin Bureau of Economic Assistance as our base, a two percent random sample was drawn, resulting in a sample size of 3,587 households (consisting of 10,393 individuals). In the first half of the report, employing our sample data in conjunction with the 1980 Census counts, rates of participation were calculated for specific demographic groups. It was found that those most likely to be receiving income or in-kind transfers in Wisconsin were individuals who were: (1) female; (2) black; (3) children and young adults in their 20s; (4) residing in a major metropolitan county; and (5) female-headed households composed of two or more individuals. Furthermore, black women in their 20s with children had very high participation rates.

In the second half of the report we examined the differences and similarities among five program combinations: AFDC/FS/MA; AFDC/MA; FS; FS/MA; and MA. Both AFDC groups were characterized by two generation households, usually headed by a female, and containing children. Households receiving only food stamps were primarily one generation with no children present. Often these households contained one individual, of which a sizeable number were males. In addition, FS case heads tended to be somewhat older than the AFDC case heads. Households receiving food stamps and Medicaid were equally divided between one and two generation structures. FS/MA households were primarily composed of one person households, married couple families, or female householders with no husband present. Medicaid recipients tended to live alone or in a nursing home, were elderly, often incapacitated, and were either widowed or never married. In all programs the majority of the caseload was white. Also, recipients in all program combinations possessed low levels of education, employment, and income (AFDC/MA households having the highest levels for all three items).

There are several ways to interpret the data presented in this report. First, it is obvious from our analysis that the individuals and families we have examined are clearly in need of financial and medical support. The majority of households were shown to be generating little income. In the case of Medicaid, recipients were often incapacitated and elderly. AFDC families were primarily headed by a sole female with several children. There is little doubt that the households in our sample are in need of income and/or inkind transfers. Indeed most of these households would fall well below the official poverty level without such transfers. It would appear that the State's resources regarding AFDC, food stamps, and Medicaid are going to the truly needy.

Second, it is clear that particular demographic characteristics are associated with participation in the three welfare programs examined. Of course this is no surprise, as previous research on poverty and welfare participation has demonstrated (e.g., Sanger, 1979; Schiller, 1980). However it does raise an important issue. That is, what can be done to improve the economic conditions of particular high risk groups? While this question has been hotly debated during the past 20 years, it remains as relevant today as in the past. Certainly our data indicate that recipients of AFDC, food stamps, and/or Medicaid are not a random sample of the overall population. For example, we estimated that half of female heads of households in Wisconsin are participating in one or more of the three welfare programs examined. There is no doubt that being a female household head greatly increases the chances of living under poverty conditions and utilizing welfare. Yet for many of these women, becoming a head of household is an unintentional act. Unwanted and unanticipated pregnancies among single women often lead to female headship, which in turn may result in poverty and welfare use (Sanger, 1979). Consequently, preventing unwanted pregnancies through effective family planning services may be an important intervening step in reducing the number of unintended female headed households, and subsequently the number of families in poverty. Likewise, female headed households can be created through separation or divorce. A woman with children often retains custody of her children following a divorce or legal separation. However, court ordered child support and/or alimony payments may be nonexistent (see Sorenson and MacDonald, 1981). This, along with the loss of the primary wage earner, and the lack of employable skills, may cause female heads to turn to welfare for assistance. Better enforcement

of court ordered child support and alimony payments may be one approach towards economically helping female headed families.

Finally, what will the future hold for these and other welfare recipients? While the data examined in this report are unable to address this question, the Applied Population Laboratory is currently focusing on a longitudinal sample which will enable a number of important research and policy oriented questions to be addressed. Average length of welfare utilization, factors associated with exiting and reentering specific welfare programs, the effects of governmental program changes on welfare use, and other questions of interest will be examined. As greater knowledge is gained regarding welfare utilization, we come closer to understanding the problems, difficulties, and solutions involved in helping welfare recipients.

FOOTNOTES

1. It should be noted that the description given here pertains to the standard form of AFDC. However, there are several variations of AFDC (e.g., AFDC-Unemployed Parent) which will be discussed briefly in the analysis.

2. A slight modification is made in these requirements if the household contains an individual aged 60 or older or a disabled person receiving either Supplemental Security Income or Social Security disability benefits.

3. This assumption introduces only a slight amount of bias into the analysis. Between 1973 and 1977, interracial marriage constituted less than one half of one percent of all marriages in Wisconsin (Wisconsin Department of Health and Social Services, Bureau of Health Statistics, unpublished tables).

4. Participation in a specific program can potentially be based on two different CRN codes. The first involves case eligibility for the programs; the second involves actual receipt of program assistance. The two are not the same. It made more sense for us to employ actual receipt of economic assistance rather than the strict eligibility code as the participation criterion for both the AFDC and FS programs. However, this method could not be applied in determining Medicaid participation, for information on the transfer of monetary compensation under this program

is not part of the CRN database. Moreover, AFDC recipients are automatically eligible for Medicaid but may not be making current demands on the program. For these reasons, participation in the Medicaid Program was based only on the CRN case eligibility code rather than on any actual use of program funds in July 1981--the month in which the sample was drawn.

5. Data for 1973 (Sawhill et al., 1975) showed that approximately 50 percent of all female-headed families in the nation were receiving welfare benefits--a percentage very close to what we have estimated. If we were able to include all welfare programs, our estimated percentage certainly would be even higher.

6. We recognize the risk of implying longitudinal trends from cross-sectional data.

7. Sampling error may account for the percentage difference between female and male black children.

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TABLE 1. Estimated Percentage (and Number) of the Population Residing in Households Receiving AFDC, Food Stamps, and/or Medicaid by Selected Demographic Characteristics.¹

Estimated Percentage (and Number) of the Population Who Are:			
Demographic Characteristics	Welfare Case Heads	Individuals on a Welfare Grant	Individuals in a Welfare Household
Total	3.8 (179,350)	9.3 (437,650)	11.0 (519,650)
Sex			
Male	1.6 (38,900)	7.8 (179,800)	9.5 (221,850)
Female	5.8 (140,450)	10.7 (257,850)	12.3 (297,800)
Race ²			
White	2.8 (125,700)	6.7 (297,150)	7.7 (344,150)
Black	16.1 (29,600)	45.2 (82,450)	56.6 (103,850)
Age ³			
0-4	-	19.2 (66,650)	20.5 (71,200)
5-9	-	17.3 (59,650)	18.6 (64,000)
10-14	-	13.4 (52,700)	14.8 (58,150)
15-19	2.6 (12,400)	10.2 (47,800)	12.6 (59,000)
20-24	7.9 (36,050)	10.2 (46,000)	11.6 (53,250)
25-29	7.0 (28,200)	9.1 (36,750)	10.0 (40,500)
30-34	6.1 (21,550)	8.2 (28,550)	9.9 (34,800)
35-39	5.7 (15,600)	7.6 (20,650)	8.6 (23,300)
40-44	4.2 (9,600)	5.7 (13,100)	7.0 (16,300)
45-49	2.9 (6,400)	3.8 (8,450)	5.4 (11,900)
50-54	2.6 (5,950)	3.4 (8,000)	4.5 (10,650)
55-59	2.5 (4,650)	2.6 (5,850)	4.4 (8,100)
60-64	2.0 (4,300)	2.7 (5,550)	3.5 (7,500)
65-69	1.7 (3,100)	2.0 (3,750)	2.9 (5,500)
70-74	2.8 (4,200)	3.2 (4,650)	3.6 (5,500)
75+	11.0 (26,250)	11.5 (26,850)	11.8 (28,200)
County of Residence			
Milwaukee	5.7 (55,350)	13.4 (129,100)	17.0 (164,450)
Other Metropolitan	3.2 (67,250)	7.9 (163,400)	9.2 (192,650)
Nonmetropolitan	3.4 (56,750)	8.7 (145,150)	9.7 (162,550)

1. Percentage figures are calculated by dividing weighted sample frequencies (weighted by 50 to estimate welfare population numbers, shown in parentheses) by appropriate general population figures taken from Summary Tape File 1A, 1980 Census of Population. See the text for a more complete discussion.
2. Numbers in parentheses do not sum to total because other nonwhite races are omitted from this analysis.
3. Numbers in parentheses do not sum to total because missing age data are omitted from this analysis.

TABLE 2. Estimated Percentage (and Number) of Households Receiving AFDC, Food Stamps, and/or Medicaid.¹

Household Type	Welfare Households as a Percent of All Households (and Number)
One Person ²	
Male Householder	7.5 (10,850)
Female Householder	5.3 (12,100)
Two or More Persons	
Married-Couple Family	4.0 (41,050)
Other Family	
Male Householder (No wife present)	11.8 (4,500)
Female Householder (No husband present)	49.9 (67,900)
Non-Family Household	
Male Householder	14.2 (6,050)
Female Householder	16.4 (4,950)

1. Percentage figures are calculated by dividing weighted sample frequencies (weighted by 50 to estimate welfare population number, shown in parentheses) by appropriate general population figures taken from Summary Tape File 1A, 1980 Census of Population. See the text for a more complete discussion.

2. Excludes individuals in institutions (e.g. nursing homes).

Table 3. Estimated Percentage (and Number) of Wisconsin Residents Residing in Households Receiving AFDC, Food Stamps, and/or Medicaid by Age and Sex.¹

Age ²	Estimated Percentage (and Number) of Wisconsin Residents Who Are:									
	Welfare Case Heads		Individuals on Welfare Grant				Individuals in a Welfare Household			
	Male	Female	Male	Female	Male	Female	Male	Female	Male	Female
0-4	-	-	18.4	20.1	(32,700)	(33,950)	19.8	(35,300)	21.3	(35,900)
5-9	-	-	17.2	17.4	(30,500)	(29,150)	18.7	(33,000)	18.5	(31,000)
10-14	-	-	13.3	13.5	(26,750)	(25,950)	14.6	(29,300)	15.0	(28,850)
15-19	1.4	4.0	8.9	11.6	(20,900)	(26,900)	11.5	(27,050)	13.8	(31,950)
20-24	3.0	13.0	6.1	14.3	(13,750)	(32,250)	7.8	(17,550)	15.8	(35,700)
25-29	2.4	11.7	6.0	12.4	(12,050)	(24,700)	7.1	(14,350)	13.1	(26,150)
30-34	1.9	10.5	5.2	11.3	(9,000)	(19,550)	7.4	(12,900)	12.6	(21,900)
35-39	1.8	9.6	4.8	10.3	(6,500)	(14,150)	5.8	(7,850)	11.3	(15,450)
40-44	2.0	6.3	4.4	6.9	(5,050)	(8,050)	5.5	(6,250)	8.7	(10,050)
45-49	1.4	4.4	2.9	4.8	(3,100)	(5,350)	4.5	(4,850)	6.3	(7,050)
50-54	1.7	3.4	3.0	3.9	(3,400)	(4,600)	4.0	(4,550)	5.2	(6,100)
55-59	2.0	3.0	2.9	3.4	(3,250)	(4,050)	4.4	(4,800)	4.5	(5,300)
60-64	1.4	2.6	2.3	3.0	(2,200)	(3,350)	3.5	(3,400)	3.7	(4,100)
65-69	1.1	7.2	1.6	2.4	(1,350)	(2,400)	2.7	(2,300)	3.2	(3,200)
70-74	2.9	2.9	3.3	3.1	(2,050)	(2,600)	4.0	(2,500)	3.6	(3,000)
75+	7.4	13.5	7.9	13.6	(6,850)	(20,000)	8.7	(7,500)	14.0	(20,700)

1. Percentage figures are calculated by dividing weighted sample frequencies (weighted by 50 to estimate welfare population numbers, shown in parentheses) by appropriate population figures taken from Summary Tape File 1A, 1980 Census of Population. See the text for a more complete discussion. Numbers in parentheses do not sum to total because missing age data are omitted from this analysis.

Table 4. Estimated Percentage (and Number) of the Population Residing in Households Receiving AFDC, Food Stamps, and/or Medicaid by Race and Sex.¹

Race/Sex	Estimated Percentage (and Number) of the Population Who Are:					
	Welfare Case Heads		Individuals on a Welfare Grant		Individuals in a Welfare Household	
White ²						
Male	1.3	(27,750)	5.7	(123,100)	6.8	(148,850)
Female	4.3	(97,950)	7.7	(174,050)	8.6	(195,300)
Black ²						
Male	6.0	(5,200)	35.9	(31,300)	47.0	(41,000)
Female	25.6	(24,400)	53.7	(51,150)	66.0	(62,850)

1. Percentage figures are calculated by dividing weighted sample frequencies (weighted by 50 to estimate welfare population numbers, shown in parentheses) by appropriate general population figures taken from Summary Tape File 1A, 1980 Census of Population. See the text for a more complete discussion.
2. Numbers in parentheses do not sum to total because other nonwhite races are omitted from this analysis.

TABLE 5. Estimated Percentage (and Number) of the Population Residing in Households Receiving AFDC, Food Stamps and/or Medicaid by Age, Sex, and Race.¹

Age ²	White Male	White Female	Black Male	Black Female
- Percentage (and Number) of the Population Who Are Welfare Case Heads -				
0-4	-	-	-	-
5-9	-	-	-	-
10-14	-	-	-	-
15-19	1.0 (2,150)	2.9 (6,200)	4.8 (500)	15.9 (1,700)
20-24	1.8 (3,850)	9.3 (19,650)	18.9 (1,750)	58.9 (6,250)
25-29	1.8 (3,350)	7.6 (14,150)	9.3 (750)	66.0 (6,250)
30-34	1.4 (2,250)	8.0 (12,950)	11.0 (700)	50.7 (3,800)
35-39	1.4 (1,750)	7.4 (9,600)	7.8 (350)	36.9 (1,950)
40-44	1.3 (1,400)	4.6 (5,050)	8.1 (300)	32.8 (1,450)
45-49	1.1 (1,100)	2.6 (2,750)	8.0 (250)	29.3 (1,150)
50+	2.2 (12,150)	4.1 (27,300)	6.4 (650)	15.9 (1,900)
All Ages	1.3 (27,750)	4.3 (97,950)	6.0 (5,200)	25.6 (24,400)
- Percentage (and Number) of the Population on a Welfare Grant -				
0-4	13.1 (21,250)	13.8 (21,250)	67.3 (6,850)	79.9 (8,150)
5-9	11.7 (18,900)	11.9 (18,100)	68.1 (7,400)	66.8 (7,150)
10-14	9.3 (17,200)	9.6 (17,000)	57.8 (6,150)	59.3 (6,250)
15-19	6.0 (13,250)	8.2 (17,750)	38.7 (4,050)	55.7 (5,950)
20-24	4.6 (9,650)	10.4 (21,900)	24.3 (2,250)	62.2 (6,600)
25-29	5.0 (9,500)	8.2 (15,200)	13.1 (1,050)	67.1 (6,350)
30-34	4.1 (6,750)	8.7 (14,100)	19.6 (1,250)	51.3 (3,850)
35-39	4.2 (5,350)	8.1 (10,500)	11.2 (500)	36.9 (1,950)
40-44	3.3 (3,550)	5.1 (5,600)	10.7 (400)	32.8 (1,450)
45-49	2.1 (2,200)	2.9 (3,100)	12.7 (400)	30.6 (1,200)
50+	2.8 (14,900)	4.4 (28,450)	8.4 (800)	16.3 (1,850)
All Ages	5.7 (123,100)	7.7 (174,050)	35.9 (31,300)	53.7 (51,150)
- Percentage (and Number) of the Population Residing in a Welfare Household -				
0-4	13.8 (22,500)	14.5 (22,250)	77.6 (7,900)	86.3 (8,800)
5-9	12.4 (20,050)	12.6 (19,150)	77.7 (8,450)	71.0 (7,600)
10-14	9.9 (18,300)	10.4 (18,400)	65.8 (7,000)	68.3 (7,200)
15-19	7.9 (17,350)	9.5 (20,450)	48.3 (5,050)	68.8 (7,350)
20-24	5.7 (12,050)	11.3 (23,850)	35.7 (3,300)	69.8 (7,400)
25-29	5.7 (10,900)	8.7 (16,200)	20.5 (1,650)	69.7 (6,600)
30-34	5.8 (9,550)	9.5 (15,450)	26.6 (1,700)	59.3 (4,450)
35-39	4.9 (6,250)	8.7 (11,200)	16.8 (750)	43.5 (2,300)
40-44	3.8 (4,150)	6.2 (6,850)	21.5 (800)	43.0 (1,900)
45-49	3.7 (3,800)	4.1 (4,350)	17.5 (550)	37.7 (1,400)
50+	3.7 (20,000)	5.0 (32,900)	12.3 (1,250)	22.1 (2,650)
All Ages	6.8 (148,850)	8.6 (195,300)	47.0 (41,000)	66.0 (62,850)

1. Percentage figures are calculated by dividing weighted sample frequencies (weighted by 50 to estimate welfare population numbers, shown in parentheses) by appropriate general population figures taken from Summary Tape File 1A, 1980 Census of Population. See the text for a more complete discussion.

2. Numbers in parentheses do not sum to total because of the handling of missing age data.

Table 6. Distribution of Total Sample Among Program Types.

Program Type	Welfare Heads	Individuals in a Welfare Household
AFDC/FS/MA	37.6%	47.8%
AFDC/MA	13.2	18.3
FS	12.4	7.9
FS/MA	13.2	13.7
MA	23.5	12.4
Total	100.0% (3,538)	100.0% (10,306)

Table 7. Distribution of AFDC Sample Among Program Types.

Type of AFDC	Welfare Case Heads	Individuals in a Welfare Household
Regular	85.0%	83.7%
Unemployed Parent	9.4	11.2
Not Legally Responsible		
Relative	3.1	3.3
Maternity Care	2.5	1.8
Total	100.0% (1,798)	100.0% (6,811)

Table 8. Living Arrangement by Program Type.

Living Arrangement	Program Type					Total
	AFDC			FS		
	FS MA	AFDC MA	FS	MA	MA	
--Case Heads--						
Home	99.9%	99.6%	99.5%	98.1%	25.6%	82.1%
Nursing Home	0.0	0.0	0.0	0.4	74.0	17.5%
Other ¹	0.1	0.4	0.5	1.5	0.4	0.4%
Total	100.0% (1331)	100.0% (467)	100.0% (440)	100.0% (468)	100.0% (832)	100.0% (3538)
--All Individuals--						
Home	99.9%	99.7%	99.8%	99.3%	51.3%	93.7%
Nursing Home	0.0	0.1	0.0	0.1	48.4	6.0%
Other ¹	0.1	0.2	0.2	0.6	0.3	0.3%
Total	100.0% (4924)	100.0% (1887)	100.0% (810)	100.0% (1409)	100.0% (1276)	100.0% (10,306)

1. Includes those in a foster home, school or college, hospital, relative's home, treatment center, away for employment, section 202, 236 housing, or institution.

Table 9. Household Size by Program Type.

Household Size	Program Type					Total
	AFDC	AFDC MA	FS	FS	MA	
	FS MA			MA		
1	0.8%	0.3%	54.8%	30.1%	80.8%	30.2%
2	24.6	17.8	26.4	18.8	5.5	18.7
3	28.2	24.6	9.8	17.1	4.8	18.5
4	20.5	22.7	4.1	11.3	3.0	13.4
5	13.5	16.5	2.3	10.7	2.9	9.6
6	6.4	9.9	0.9	7.1	1.3	5.1
7+	6.0	8.2	1.7	4.9	1.7	4.5
Total	100.0% (1331)	100.0% (467)	100.0% (440)	100.0% (468)	100.0% (832)	100.0% (3538)
Average House- hold Size	3.7	4.0	1.8	3.0	1.5	2.9

Table 10. Number of Generations in Household by Program Type.

Household Size	Program Type					Total
	AFDC FS MA	AFDC MA	FS	FS MA	MA	
1	2.6%	2.8%	91.1%	50.4%	92.2%	41.0%
2	95.4	94.0	8.4	49.1	3.0	57.6
3	2.0	3.2	0.5	0.4	0.4	1.4
Total	100.0% (1331)	100.0% (467)	100.0% (440)	100.0% (468)	100.0% (832)	100.0% (3538)

Table 11. Household Structure by Program Type.

Household Structure	Program Type					Total
	AFDC	AFDC		FS	MA	
	FS MA	MA	FS	MA	MA	
One Person						
Female Householder	0.8%	0.6%	22.5%	17.9%	55.9%	18.7%
Male Householder	0.0	0.0	32.3	12.2	24.9	11.5
Two or More Persons						
Married-Couple Family	23.2	39.4	13.0	38.2	6.1	22.1
Other Family						
Female Householder (No Husband Present)	71.9	54.8	4.8	17.9	4.7	38.3
Male Householder (No Wife Present)	1.8	2.1	5.0	2.1	2.4	2.4
Non-Family Household						
Female Householder	0.8	1.3	7.3	5.3	2.5	2.7
Male Householder	0.1	0.0	15.0	5.6	2.9	3.3
Other	1.4	1.7	0.2	0.6	0.6	1.0
Total	100.0% (1330)	100.0% (467)	100.0% (440)	100.0% (468)	100.0% (832)	100.0% (3537)

Table 12. Number of Children in Household by Program Type and Type of Household.

Number of Children	Program Type					Total
	AFDC					
	FS MA	AFDC MA	FS	FS MA	MA	
--Households with Female Heads (No Spouse Present)--						
0	3.8%	6.8%	90.1%	60.6%	95.1%	38.3%
1	41.5	51.7	7.9	18.1	4.2	28.9
2	29.2	25.3	1.3	14.5	0.4	18.2
3	14.8	10.6	0.7	3.1	0.2	8.6
4	7.1	3.8	0.0	2.6	0.2	4.0
5+	3.6	1.8	0.0	1.1	0.0	2.0
Total	100.0% (978)	100.0% (265)	100.0% (152)	100.0% (193)	100.0% (526)	100.0% (2114)
Average Number of Children	1.9	1.6	0.1	0.7	0.1	1.2
--Households with Male Heads (No Spouse Present)--						
0	4.0%	20.0%	99.6%	96.8%	99.2%	93.8%
1	44.0	30.0	0.0	1.1	0.0	2.5
2+	52.0	50.0	0.4	2.1	0.8	4.7
Total	100.0% (25)	100.0% (10)	100.0% (230)	100.0% (93)	100.0% (251)	100.0% (609)
Average Number of Children	1.9	1.3	0.0	0.1	0.0	0.1
--Married Couple Households--						
0	3.6%	7.1%	75.4%	18.4%	47.1%	15.9%
1	25.9	19.0	15.8	19.0	23.5	21.8
2	27.8	31.0	5.3	21.2	15.7	24.6
3	23.0	22.3	1.8	19.0	7.8	19.4
4	12.9	15.8	0.0	12.8	0.0	11.8
5+	6.8	4.8	1.8	9.6	5.9	6.5
Total	100.0% (309)	100.0% (184)	100.0% (57)	100.0% (179)	100.0% (51)	100.0% (780)
Average Number of Children	2.4	2.4	0.4	2.3	1.1	2.1

Table 13. County of Residence by Program Type.

County	Program Type					Total	1980 State Population
	AFDC FS MA	AFDC MA	FS	FS MA	MA		
--Case Heads--							
Milwaukee	38.1%	27.0%	40.7%	24.4%	20.0%	30.9%	22.0%
Other Metro ¹	34.8%	44.3	37.0	37.8	38.5	37.6	42.0
Nonmetro	27.1	28.7	22.3	37.8	41.6	31.5	36.0
Total	100.0% (1331)	100.0% (467)	100.0% (440)	100.0% (468)	100.0% (832)	100.0% (3538)	100.0%
--All Individuals--							
Milwaukee	37.5%	27.0%	40.0%	22.1%	20.9%	31.6%	20.5%
Other Metro ¹	34.7%	44.4	38.1	33.1	39.2	37.1	44.2
Nonmetro	27.7	28.6	21.9	44.7	39.9	31.3	35.3
Total	100.0% (4924)	100.0% (1887)	100.0% (810)	100.0% (1409)	100.0% (1276)	100.0% (10,306)	100.0%

1. Other Metro category includes the counties of Brown, Calumet, Chippewa, Dane, Douglas, Eau Claire, Kenosha, La Crosse, Marathon, Outagamie, Ozaukee, Racine, Rock, St. Croix, Sheboygan, Washington, Waukesha and Winnebago.

Table 14. Age by Program Type.

Age	Program Type					Total
	AFDC	AFDC	FS	FS	MA	
	FS MA	MA		MA		
--Case Heads--						
Less than 15	0.0%	0.0%	0.0%	0.2%	0.0%	0.0%
15-19	6.9	4.7	0.2	12.2	8.9	7.0
20-24	26.5	18.8	23.4	22.6	7.0	20.0
25-29	23.4	23.3	16.8	10.9	1.9	15.9
30-34	16.8	19.1	11.6	9.0	2.3	12.0
35-39	11.6	16.3	6.4	7.3	2.3	8.8
40-44	7.0	6.9	6.1	5.6	1.6	5.4
45-49	3.6	4.3	5.7	3.4	2.0	3.6
50-54	2.3	3.4	9.3	2.8	2.3	3.4
55-59	1.0	1.3	10.9	5.1	2.5	3.2
60-64	0.6	1.3	6.8	3.0	3.0	2.3
65-69	0.2	0.4	1.1	3.6	4.1	1.7
70-74	0.0	0.2	0.7	5.3	6.3	2.3
75+	0.2	0.0	0.9	9.0	55.9	14.5
Total	100.0% (1331)	100.0% (467)	100.0% (440)	100.0% (468)	100.0% (832)	100.0% (3538)
Mean Age	30.4	32.5	38.7	39.6	66.9	41.6
--All Individuals--						
0-4	20.0%	12.7%	3.0%	13.2%	2.8%	14.3%
5-9	16.8	14.4	3.0	11.3	3.3	12.9
10-14	14.1	15.5	2.2	10.4	4.2	11.7
15-19	11.3	14.2	4.4	13.3	13.3	11.8
20-24	10.5	8.1	19.4	13.0	6.5	10.6
25-29	8.8	8.7	14.2	6.7	2.4	8.1
30-34	6.8	9.0	10.5	6.1	3.5	6.9
35-39	4.4	6.2	5.9	4.7	3.0	4.7
40-44	2.8	3.8	5.2	3.5	2.7	3.3
45-49	1.6	2.5	5.4	2.3	3.5	2.4
50-54	1.1	1.9	7.7	2.5	2.6	2.1
55-59	0.8	1.1	9.5	2.6	3.0	2.0
60-64	0.5	0.8	5.2	2.3	2.9	1.5
65-69	0.2	0.4	2.2	2.1	3.4	1.1
70-74	0.1	0.4	1.2	2.2	4.5	1.1
75+	0.1	0.4	1.0	3.7	38.3	5.6
Total	100.0% (4924)	100.0% (1887)	100.0% (810)	100.0% (1409)	100.0% (1276)	100.0% (10,306)
Mean Age	17.7	20.9	35.4	25.9	53.9	25.4

Table 15. Race by Program Type.

County	Program Type					Total	1980 State Population
	AFDC						
	FS MA	AFDC MA	FS	FS MA	MA		
--Case Heads--							
White	62.2%	70.4%	65.0%	79.5%	80.0%	70.1%	94.4%
Black	26.6	18.2	20.7	7.5	2.8	16.6	3.9
Other ¹	11.2	11.3	14.3	13.0	17.2	13.3	1.7
Total	100.0% (1331)	100.0% (467)	100.0% (440)	100.0% (468)	100.0% (832)	100.0% (3538)	100.0%
--All Individuals--							
White	59.8%	68.8	60.5%	78.1%	77.4%	66.2%	94.4%
Black	28.0	18.9	21.6	6.6	5.2	20.1	3.9
Other ¹	12.2	12.3	17.9	15.3	17.4	13.7	1.7
Total	100.0% (4924)	100.0% (1887)	100.0% (810)	100.0% (1409)	100.0% (1276)	100.0% (10,306)	100.0%

1. Includes other racial groups as customarily tabulated by the Census Bureau in addition to several Hispanic/Spanish Origin categories. Persons in these latter categories may be of any race.

Table 16. Program Type by Race.

Race	Program Type					Total	
	AFDC	AFDC	FS	FS	MA		
	FS MA			MA			
--Case Heads--							
White	33.4%	13.3	11.5	15.0	26.8	100.0%	(2481)
Black	60.2%	14.5	15.5	6.0	3.9	100.0%	(588)
Other ¹	31.8%	11.3	13.4	13.0	30.5	100.0%	(469)
Total	37.6%	13.2	12.4	13.2	23.5	100.0%	(3538)
--All Individuals--							
White	43.2%	19.0	7.2	16.1	14.5	100.0%	(6824)
Black	66.6%	17.2	8.5	4.5	3.2	100.0%	(2067)
Other ¹	42.5%	16.4	10.2	15.2	15.7	100.0%	(1415)
Total	47.8%	18.3	7.9	13.7	12.4	100.0%	(10,306)

1. Includes other racial groups as customarily tabulated by the Census Bureau in addition to several Hispanic/Spanish Origin categories. Persons in these latter categories may be of any race.

Table 17. Sex by Program Type.

Sex	Program Type					Total
	AFDC					
	FS MA	AFDC MA	FS	FS MA	MA	
--Case Heads--						
Female	94.3%	95.9%	44.5%	69.0%	67.3%	78.6%
Male	5.7	4.1	55.5	31.0	32.7	21.4
Total	100.0% (1331)	100.0% (467)	100.0% (440)	100.0% (468)	100.0% (832)	100.0% (3538)
--All Individuals--						
Female	59.8%	57.0%	42.5%	54.0%	61.5%	57.3%
Male	40.2	43.0	57.5	46.0	38.5	42.7
Total	100.0% (4924)	100.0% (1887)	100.0% (810)	100.0% (1409)	100.0% (1276)	100.0% (10,306)

Table 18. Marital Status by Program Type: Case Heads.

Marital Status	Program Type					Total
	AFDC	AFDC		FS		
	FS MA	MA	FS	MA	MA	
Never married	32.3%	26.1%	46.2%	29.3%	31.2%	32.5%
Married, spouse present	23.3	39.7	13.0	38.2	6.2	22.2
Separated	21.1	12.1	12.1	6.8	15.3	15.5
Divorced	21.5	19.8	20.8	11.5	4.6	15.9
Widowed	1.7	2.4	7.8	14.1	42.7	13.8
Total	100.0% (1325)	100.0% (464)	100.0% (437)	100.0% (468)	100.0% (824)	100.0% (3518)

Table 19. Education Level by Program Type: Case Heads.

Education	Program Type					Total
	AFDC			FS		
	FS MA	AFDC MA	FS	FS MA	MA	
8 or less	6.8%	5.0%	16.7%	19.1%	43.3%	15.3%
9-11	41.1	26.8	32.6	33.9	22.2	33.9
12	40.7	51.8	37.5	35.7	25.9	38.9
13-15	10.3	14.7	10.0	9.0	5.9	10.0
16	0.8	1.4	2.7	1.6	2.4	1.5
17 or more	0.3	0.2	0.4	0.7	0.4	0.4
Total	100.0% (1264)	100.0% (436)	100.0% (408)	100.0% (445)	100.0% (460)	100.0% (3013)
Mean years	11.2	11.6	10.9	10.7	9.6	10.9

Table 20. School Status by Program Type.

School Status	Program Type					Total
	AFDC			FS		
	FS MA	AFDC MA	FS	MA	MA	
--Case Heads--						
Not in school	93.2%	94.6%	95.2%	94.0%	92.3%	93.5%
Part-time	2.2	2.8	3.0	0.9	1.5	2.0
Full-time	4.7	2.6	1.8	5.1	6.3	4.5
Total	100.0% (1331)	100.0% (467)	100.0% (440)	100.0% (468)	100.0% (816)	100.0% (3522)
--All Individuals--						
Not in school	66.8%	64.8%	92.8%	72.3%	88.4%	71.9%
Part-time	4.2	3.1	2.4	2.9	1.5	3.4
Full-time	29.0	32.0	4.8	24.7	10.1	24.7
Total	100.0% (4873)	100.0% (1863)	100.0% (806)	100.0% (1391)	100.0% (1256)	100.0% (10,189)

Table 21. Incapacitation by Program Type.

Incapacita- tion Status	Program Type					Total
	AFDC			FS		
	FS MA	AFDC MA	FS	MA	MA	
--Case Heads--						
Not incapacitated	95.3%	97.9%	84.8%	82.1%	41.9%	80.2%
Incapacitated	4.7	2.1	15.2	17.9	58.1	19.8
Total	100.0% (1331)	100.0% (467)	100.0% (440)	100.0% (468)	100.0% (817)	100.0% (3523)
--All Individuals--						
Not incapacitated	97.5%	98.8%	89.0%	91.9%	61.2%	91.8%
Incapacitated	2.5	1.2	11.0	8.1	38.8	8.2
Total	100.0% (4892)	100.0% (1865)	100.0% (808)	100.0% (1398)	100.0% (1258)	100.0% (10,221)

Table 22. Employment Status by Program Type: Case Heads.

Employment	Program Type					Total
	AFDC FS MA	AFDC MA	FS	FS MA	MA	
Not employed	83.4%	60.6%	84.7%	80.3%	95.2%	82.9%
Part-time	9.6	11.6	11.6	11.8	3.2	8.9
Full-time	7.0	27.8	3.6	7.9	1.6	8.2
Total	100.0% (1330)	100.0% (467)	100.0% (439)	100.0% (467)	100.0% (832)	100.0% (3535)

Table 23. Income by Program Type.

Income	Program Type					Total
	AFDC					
	FS	AFDC	FS			
	MA	MA	FS	MA	MA	
--Gross Monthly Earned Income of Case Head--						
\$0	86.9%	58.0%	83.4%	79.5%	93.3%	83.2%
\$1-249	4.7	3.6	9.1	6.8	3.8	5.2
\$250-499	5.0	5.6	6.4	6.4	1.4	4.6
\$500-749	2.8	18.2	1.1	5.8	4.3	4.6
\$750 or more	0.7	14.6	0.0	1.5	5.6	2.5
Total	100.0% (1331)	100.0% (467)	100.0% (440)	100.0% (468)	100.0% (832)	100.0% (3538)
Mean	\$47.5	\$278.5	\$41.2	\$83.1	\$22.3	\$75.3
--Total Gross Household Income--						
\$0	81.4	45.0	81.8	68.6	91.5	77.3
\$1-249	6.2	3.2	9.8	8.1	3.8	6.0
\$250-499	6.1	7.3	7.0	8.1	1.7	5.6
\$500-749	4.4	18.6	1.4	8.3	1.1	5.7
\$750 or more	1.8	25.9	0.0	6.8	1.9	5.5
Total	100.0% (1330)	100.0% (467)	100.0% (440)	100.0% (468)	100.0% (832)	100.0% (3537)
Mean	\$76.69	\$438.02	\$45.25	\$161.44	\$43.05	\$124.21

Table 24. Amount of Grant by Program Type.

Grant Amount	Program Type				Total
	AFDC	AFDC	FS	FS	
	FS MA	MA		MA	
--AFDC Amount--					
\$1-99	2.0%	4.7%	-	-	2.7%
\$100-199	5.5	30.2	-	-	11.9
\$200-299	9.5	26.8	-	-	14.0
\$300-399	14.4	21.8	-	-	16.3
\$400-499	45.5	13.7	-	-	37.3
\$500-599	14.1	2.1	-	-	11.0
\$600-699	8.2	2.7	-	-	6.2
\$700 or more	0.9	0.0	-	-	0.7
Total	100.0% (1331)	100.0% (467)	-	-	100.0% (1798)
Mean	\$420.91	\$254.23	-	-	\$377.62
--Food Stamp Amount--					
\$1-99	69.6%	-	91.6%	66.9%	73.4%
\$100-199	28.2	-	7.7	23.3	23.1
\$200-299	2.0	-	0.7	7.7	2.9
\$300-399	0.2	-	0.0	1.5	0.4
\$400-499	0.0	-	0.0	0.6	0.2
Total	100.0% (1331)	-	100.0% (440)	100.0% (468)	100.0% (2239)
Mean	\$82.12	-	\$63.83	\$88.45	\$79.85
--AFDC and Food Stamp Amount--					
\$1-99	0.5%	4.7%	91.6%	66.9%	27.5%
\$100-199	3.1	30.2	7.7	23.3	12.0
\$200-299	8.6	26.8	0.7	7.7	10.3
\$300-399	7.7	21.8	0.0	1.5	7.8
\$400-499	31.4	13.7	0.0	0.6	17.9
\$500-599	24.9	2.1	0.0	0.0	12.6
\$600-699	13.4	2.7	0.0	0.0	6.7
\$700 or more	10.5	0.0	0.0	0.0	5.2
Total	100.0% (1331)	100.0% (467)	100.0% (440)	100.0% (468)	100.0% (2706)
Mean	\$503.02	\$254.23	\$63.83	\$88.45	\$316.97

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POVERTY IN WISCONSIN

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held November 30, 1983
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PREFACE

Poverty in Wisconsin was a one-day conference cosponsored by the Wisconsin State Data Center* and the Institute for Research on Poverty, University of Wisconsin-Madison. It was organized with two purposes in mind. The first was to study poverty in Wisconsin and its effects on particular groups including women, minorities, the elderly, and those in rural areas. The second objective was to discuss the results of these findings in light of current poverty programs and future policy decisions.

The papers in this book are organized around the two stated objectives. The first six papers focus on poverty within the State and among certain sub-populations. Sheldon Danziger begins the series with a paper comparing poverty in Wisconsin to that in the United States. In a second paper he examines the rise in poverty using alternative measures.

The four succeeding papers present data and trends in poverty for specific segments of the population. Poverty among minorities is the subject of a paper by Stephen Tordella. Ann Nichols-Casebolt looks at women and poverty, and Patricia Guhleman and Doris Slesinger examine poverty among the elderly. Lastly, William Saupe and John Belknap discuss Wisconsin's rural poor.

The final two papers address the issue of poverty in the context of Wisconsin's relief programs. Maurice MacDonald reviews the impact of Reagan's budget cuts on Wisconsin's food stamp recipients. Mark Rank and Paul Voss describe the characteristics of Wisconsin's welfare population.

The Poverty in Wisconsin conference was structured to include lecture-style presentations and panel and audience discussions. The scope of this book permits only the publication of the papers presented, but the sponsors would like to acknowledge members of the panel discussions whose insights and remarks contributed greatly to the success of the conference.

A special acknowledgement is also extended to Stephen Tordella who first conceived of the idea of a conference on poverty and who was the driving force in its overall organization. Special thanks also to Karen Daramola and Karen Weed for their editorial and administrative assistance in producing this publication. The Poverty in Wisconsin conference was supported through funds from the University of Wisconsin-Extension.

*The Wisconsin State Data Center is a joint effort of the Applied Population Laboratory, Department of Rural Sociology, University of Wisconsin-Extension; and Demographic Services Center, Wisconsin Department of Administration. They are joined by 38 affiliate organizations statewide who assist in the dissemination of demographic information on Wisconsin.

RECENT INCREASES IN POVERTY: A COMPARISON
OF WISCONSIN AND THE U.S.*

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Table 1 shows, for each state, the official Census Bureau measure of the incidence of poverty for all persons for 1978 and 1982, and the percentage increase in poverty over this period. The poverty line, which is indexed to the consumer price index, increased from \$6662 to \$9862 for a nonfarm family of four. In 1982, the poverty line varied from \$4901 for a single family, to \$19,698 for a household of nine or more persons. While prices, and hence the poverty line, increased by almost 50 percent over this four-year period, median family income increased by only 33 percent. As a result, the poverty line for a nonfarm family of four increased from about 38 to 42 percent of the median family income (Table 2).

This decline in real family income, the increase in unemployment from 6.1 percent in 1978 to 9.7 percent in 1982, and cutbacks in government income maintenance programs all contributed to the rapid increase in poverty (see Danziger 1983, and Gottschalk and Danziger

*This research was supported by funds from the Graduate School Research Committee of the University of Wisconsin and from the Wisconsin Department of Health and Social Services.

1983). Poverty increased from 11.4 to 15.0 percent of all persons for the U.S. and for all but one of the states. In both 1978 and 1982, Wisconsin's poverty rate was among the lowest in the nation - 7.47 and 9.54 percent respectively. In 1978, only seven states had rates below eight percent and in 1982 only three had rates below ten percent. In addition, despite a more rapid increase in unemployment in Wisconsin than the U.S. (Wisconsin's unemployment rate was 5.1 percent in 1978 and 10.7 percent in 1983), the 27.8 percent increase in poverty in Wisconsin was slightly below the average increase. The contrast with Michigan is particularly striking. In 1978, its rate was less than one percentage point above Wisconsin's, but its poverty rate almost doubled by 1982, so that its 1982 rate was almost seven percentage points above Wisconsin's. The story is the same, but less dramatic, for Minnesota.

Table 3 shows three measures of poverty for each state for 1982. The first column excludes all government cash transfers, the second adds cash social insurance benefits, and the third adds cash public assistance benefits. The fourth column shows the ratio of prewelfare to pretransfer poverty. For the U.S. as a whole, this ratio is .66, meaning that poverty after these transfers is 66 percent of what it was before them. Wisconsin's ratio is .63, indicating that social insurance transfers have a slightly higher than average antipoverty effect in Wisconsin. The fifth column shows the ratio of posttransfer poverty (the official Census Bureau measure) to prewelfare poverty. It shows the antipoverty impact of cash public assistance benefits - Aid to Families with Dependent

Children (AFDC), Supplemental Security Income (SSI), and General Assistance. These welfare benefits are more influenced by state policy than are social insurance benefits. The ratio for the U.S. is .95, indicating a reduction of about five percent. Wisconsin's ratio, .90, is the third lowest in the country, indicating that its welfare programs reduce poverty by twice as much as those in the average state.

In sum, despite a doubling of its unemployment rate between 1978 and 1982, Wisconsin's poverty rate remains among the lowest in the nation, and its welfare programs among the most effective in reducing poverty.

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Table 1: Incidence of Poverty and Percentage Change in Poverty Among
All Persons, 1978 to 1982

State	1978	1982	% Change
Massachusetts	10.24%	10.26%	0.2%
Rhode Island	10.55	13.28	25.9
Connecticut	7.06	8.11	14.9
Maine	13.65	13.73	0.6
New Hampshire	7.25	10.30	42.0
Vermont	11.08	12.93	16.7
New York	11.73	14.77	25.9
New Jersey	9.51	12.17	28.0
Pennsylvania	9.79	13.54	38.3
Ohio	8.56	12.77	49.3
Indiana	9.62	12.61	31.1
Illinois	10.16	13.41	32.0
Michigan	8.31	16.30	96.3
Wisconsin	7.47	9.54	27.8
Minnesota	8.05	13.36	66.1
Iowa	7.73	13.39	73.1
Missouri	10.54	14.57	38.2
North Dakota	10.66	12.89	20.9
South Dakota	10.91	16.84	54.3
Nebraska	9.51	13.63	43.3
Kansas	10.10	10.51	4.0
Delaware	7.96	11.48	44.2
Maryland	7.61	12.30	61.7
District of Columbia	18.52	19.29	4.2
Virginia	9.80	12.52	27.8
West Virginia	13.70	24.88	81.7
North Carolina	15.57	20.24	30.1
South Carolina	13.83	21.30	54.0
Georgia	17.54	19.72	11.4
Florida	14.58	15.28	4.8
Kentucky	12.81	16.20	26.4
Tennessee	16.05	23.62	47.2
Alabama	20.54	21.59	5.1
Mississippi	22.55	22.91	1.6
Arkansas	19.18	23.76	23.9
Louisiana	17.55	22.71	29.4
Oklahoma	10.71	15.35	43.3
Texas	13.91	16.17	16.2
Montana	12.59	16.96	34.8
Idaho	8.34	15.61	87.1
Wyoming	6.03	11.99	98.9
Colorado	11.27	12.65	12.3
New Mexico	16.50	22.54	36.6

continued

Table 1 (continued): Incidence of Poverty and Percentage Change in Poverty Among All Persons, 1978 to 1982

State	1978	1982	% Change
Arizona	9.83%	14.78%	50.4%
Utah	9.33	14.79	58.4
Nevada	10.03	7.81	-22.1
Washington	10.40	12.87	23.8
Oregon	9.44	13.84	46.6
California	9.75	14.14	45.0
Alaska	8.51	10.64	25.0
Hawaii	8.25	13.48	59.8
Total U.S.	11.4	15.01	32.1

Source: Computations from March 1983 and March 1979 Current Population Surveys

^aDefined as $((1982 \text{ Poverty} - 1978 \text{ Poverty}) / (1978 \text{ Poverty})) * 100$.

Table 2: Poverty Line Compared to Median Family Income, Selected Years, 1965-1982

Year	Poverty Line For a Nonfarm Family of Four ^a	Median Family Income (2)	Ratio of Poverty Line to Median Family Income (3)	Consumer Price Index (1967=100) (4)
1965	\$3223	\$6957	.46	94.5
1968	3553	8632	.41	104.2
1970	3968	9867	.40	116.3
1973	4540	12,051	.38	133.1
1975	5500	13,719	.40	161.2
1978	6662	17,640	.38	195.4
1979	7412	19,661	.38	217.4
1980	8414	21,023	.40	246.8
1981	9287	22,388	.41	272.4
1982	9862	23,433	.42	289.1

Source: U.S. Bureau of the Census.

^aCurrent Dollars

Table 3: Incidence of Poverty Among All Persons, By State, 1982

State	Pretransfer (1)	Prewelfare, (2)	Posttransfer (3)	Ratio Col.(2)/(1) (4)	Ratio Col.(3)/(2) (5)
Massachusetts	19.07%	11.1%	10.26%	.59	.92
Rhode Island	26.93	13.89	13.28	.52	.96
Connecticut	14.92	8.27	8.11	.55	.98
Maine	24.21	14.18	13.73	.59	.97
New Hampshire	18.41	10.63	10.30	.58	.97
Vermont	24.31	14.80	12.93	.61	.87
New York	24.74	16.23	14.77	.66	.91
New Jersey	20.10	12.81	12.17	.64	.95
Pennsylvania	24.15	14.10	13.54	.58	.96
Ohio	22.44	13.42	12.77	.60	.95
Indiana	22.39	12.83	12.61	.57	.98
Illinois	21.50	13.76	13.41	.64	.97
Michigan	25.39	17.44	16.30	.69	.94
Wisconsin	16.78	10.64	9.54	.63	.90
Minnesota	23.16	14.10	13.36	.61	.95
Iowa	24.37	13.93	13.39	.57	.96
Missouri	26.18	15.82	14.57	.60	.92
North Dakota	20.98	13.57	12.89	.65	.95
South Dakota	26.10	17.74	16.84	.68	.95
Nebraska	22.08	14.01	13.63	.63	.97
Kansas	19.10	11.07	10.51	.58	.95
Delaware	18.53	12.33	11.48	.67	.93
Maryland	19.71	12.70	12.30	.64	.97
District of Columbia	28.97	20.23	19.29	.70	.95
Virginia	20.15	13.08	12.52	.65	.96
West Virginia	37.13	25.46	24.88	.69	.98
North Carolina	28.53	21.20	20.24	.74	.96
South Carolina	30.78	23.35	21.30	.76	.91
Georgia	26.82	20.80	19.72	.78	.95
Florida	28.17	15.71	15.28	.56	.97
Kentucky	25.58	16.90	16.20	.66	.96
Tennessee	31.69	23.76	23.62	.75	.99
Alabama	32.29	21.88	21.59	.68	.99
Mississippi	34.00	24.62	22.91	.72	.93
Arkansas	32.49	24.65	23.76	.76	.96
Louisiana	32.36	23.61	22.71	.73	.96
Oklahoma	23.58	15.91	15.35	.67	.97
Texas	22.19	16.52	16.17	.74	.98
Montana	26.20	17.26	16.96	.66	.98
Idaho	25.92	15.89	15.61	.61	.98
Wyoming	17.58	12.23	11.99	.70	.98
Colorado	18.79	13.02	12.65	.69	.97

continued

Table 3 (continued): Incidence of Poverty Among All Persons,
By State, 1982

State	Pretransfer (1)	Prewelfare (2)	Posttransfer (3)	Ratio Col.(2)/(1) (4)	Ratio Col.(3)/(2) (5)
New Mexico	20.47%	23.05%	22.54%	.76	.98
Arizona	23.74	15.19	14.78	.64	.97
Utah	21.93	15.26	14.79	.64	.97
Nevada	14.78	8.28	7.81	.56	.94
Washington	21.37	13.76	12.87	.64	.94
Oregon	23.67	14.69	43.84	.62	.94
California	23.27	16.24	14.14	.70	.87
Alaska	14.68	11.87	10.64	.81	.90
Hawaii	18.37	13.46	13.18	.73	.98
Total U.S.	24.03	15.88	15.01	.66	.95

Source: Computations from March 1983 Current Population Survey.

ALTERNATIVE MEASURES OF THE RECENT RISE IN POVERTY*

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Introduction

Poverty as officially measured by the Census Bureau declined from 22.4 percent of all persons in 1959 to 11.1 percent in 1973, remained in the eleven to twelve percent range for the rest of the 1970's, and then increased to 13.0 percent in 1980, 14.0 percent in 1981, and 15.0 percent in 1982. While there are many valid criticisms of the official poverty series, the recent rise in poverty is not an artifact of the official measure. Poverty increased rapidly between 1978 and 1982 for each of the alternative poverty measures discussed here. In addition, while poverty has been increasing, the antipoverty impact of income transfers has been declining. This is because a smaller percentage of poor households are receiving transfers that have been declining in real terms.

Prepared for the U.S. House Committee on Ways and Means, Hearings before the Subcommittee on Oversight and the Subcommittee on Public Assistance and Unemployment Compensation, October 18, 1983.

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Alternative Measures of Poverty

The official measure of poverty provides a set of income cutoffs adjusted for household size, the age of the head of the household, and the number of children under age 18 (until 1981, sex of the head and farm-nonfarm residence were other distinctions). The cutoffs provide an absolute measure of poverty which specifies in dollar terms minimally decent levels of consumption. The official income concept - current money income received during the calendar year - is defined as the sum of money wages and salaries, net income from self-employment, Social Security income and cash transfers from other government programs, property income (e.g., interest, dividends, net rental income), and other forms of cash income (e.g., private pensions, alimony). Current money income does not include capital gains, imputed rents, government or private benefits in-kind (e.g., food stamps, Medicare benefits, employer-provided health insurance) nor does it subtract taxes, although all of these affect a household's level of consumption.

The official poverty cutoffs are updated yearly by an amount corresponding to the change in the Consumer Price Index so that they represent the same purchasing power each year. According to this absolute standard, poverty will be eliminated when the incomes of all households exceed the poverty lines, regardless of what is happening to average household income.

There have been numerous discussions over the past fifteen years as to whether the official poverty thresholds and income concept are relevant to policy choices (U.S. Department of Health, Education,

and Welfare, 1976). Despite these controversies, the adoption of an official measure of poverty in the mid-1960s and its use as a social indicator became a symbol of this country's commitment to raising the standard of living of the poorest citizens.

Income poverty is a complex concept, and different types of poverty thresholds and income concepts are appropriate for different purposes. An absolute perspective, such as the official measure, focuses on those with incomes that fall short of a minimum (fixed) level of economic resources. On the other hand, relative poverty indicators emphasize not only the household's own level of resources, but how its position compares to that of others. A relative definition draws attention to the degree of inequality at the lower end of the income distribution. Those whose incomes fall well below the prevailing average in their society are regarded as poor, no matter what their absolute incomes may be. A relative poverty threshold, therefore, changes at about the same rate as average income.

The recent Census Bureau technical paper (1982) on the valuation of in-kind transfers addresses only the issue of augmenting the official income concept, not the issue of changing the current poverty thresholds. However, just as the valuation of in-kind transfers reduces measured poverty, the use of a relative poverty threshold during a period of rising real incomes, or an updating of the official thresholds, would increase measured poverty (e.g., see Fendler and Orshansky 1979).

Figure 1: A Matrix of Poverty Measures

	Income Concept:	
	Pretransfer Income	Posttransfer-Posttax Income
Absolute	I	II
Relative	III	IV

A matrix of poverty measures showing two income concepts and two types of poverty thresholds is presented in Figure 1. The official income concept lies somewhere between pretransfer income and posttransfer-posttax income on the first row. Census money income does not distinguish between income derived from market and private transfer sources (e.g., wages, dividends, alimony) and income derived from government sources (e.g., Social Security, Public Assistance income). As such, it fails to separate the private economy's antipoverty performance from the performance of government cash transfer programs. Households that do not receive enough money income from private sources to raise them over the poverty lines constitute the pretransfer poor (a more exact title would be pregovernment-transfer poor). Pretransfer poverty has received little attention, yet it reveals the magnitude of the problem faced by the public sector after the market economy and private transfer system (e.g., private pension, interfamily transfers) have distributed their rewards. This information is essential for analyzing the "trickle-down" effects of economic growth and for assessing the extent to which public transfer programs reduce poverty.

A related concept is prewelfare income. While pretransfer income does not count any money income from government programs, prewelfare income excludes only income from cash public assistance (i.e., welfare) programs. Social insurance benefits (e.g., Social Security, Unemployment Insurance) which are based on past earnings and tax contributions are included in prewelfare income along with private market income because they are generally perceived by the public as earned. For many, the "real" poverty population, the one to whom antipoverty policy should be addressed, is the prewelfare poor.

The valuation of in-kind transfers does move the Census closer to the concept of posttransfer-posttax income. This preferred measure could have been obtained if, in addition to adding in-kind government transfers received by the poor, the report had also added in-kind private transfers (e.g., fringe benefits) and subtracted direct taxes paid. Nonetheless, recent studies suggest that the report's results would not be significantly affected by these adjustments.

Table 1 presents seven different time series of the incidence of poverty for all persons for selected years between 1965 and 1982. Four series using the official poverty thresholds appear in the top panel, three series using a relative measure, in the bottom.

The relative measure is one developed by Robert Plotnick (Plotnick and Skidmore, 1975). In 1965, the first year for which detailed data are available, the relative poverty lines are set equal to the official (absolute) ones. (In 1965, the official lines

were equal to about 44 percent of the median income). In succeeding years the relative lines are changed at the same rate as the median income.¹ With this approach, trends in absolute and relative poverty are easily compared because they begin with the same base year value.

Consider first the four series in the top panel. Each shows that poverty declined over the 1976 to 1978 period and then increased rapidly in the 1978 to 1982 period. That the official data overstate poverty because of the failure to adjust for in-kind transfers can be seen by comparing columns three and four. Nonetheless, poverty adjusted for in-kind transfers is higher than at any point since the late 1960s. Also, column 1 shows that about a quarter of all persons in 1982 lived in households that did not receive market incomes high enough to take them out of poverty.

While the three series based on the official measure show a decline in the 1965-1978 period and then an increase, the three series based on the relative measure are more stable.² They show no significant declines for the early period, and smaller increases for the later period. Because the relative poverty line has been about ten to 15 percent above the official line, it shows more poverty in every year.

The Antipoverty Effectiveness of Transfers

Between 1965 and the mid-1970s, the growth in real expenditures for cash and in-kind transfers per recipient household far exceeded the real increase in per household income. This growth, a major

development in American social welfare policy, accounts for much of the observed declines in poverty over this period. Growth rates for transfers have slowed in recent years.

Table 2 measures the antipoverty effectiveness of major income transfer programs by the percentage of the pretransfer poor persons removed from absolute or relative poverty by transfers.³ The table divides all government transfers into cash social insurance transfers, cash public assistance transfers, and in-kind transfers (whether social insurance or public assistance).

For each type of transfer and for each measure of poverty, public transfers became increasingly effective until 1978.⁴ The fraction of absolute pretransfer poor households receiving a cash transfer payment rose from less than 70 percent in 1965 to over 80 percent in 1978 and declined slightly since then. The real value of recipients' transfers increased from 1965 to 1978, but declined thereafter. For example, the average cash transfer received by a pretransfer poor household declined by about five percent between 1978 and 1982, to about \$6000. The decline was over ten percent for the same period for nonaged women heading households, to about \$4400. As a result, transfers removed about 43 percent of the pretransfer poor from absolute poverty in 1965, over 70 percent in 1976, but less than 65 percent in 1982.

Cash social insurance transfers removed more persons from poverty in all years and for all measures than did cash public assistance transfers because a greater portion of the pretransfer poor receive them, and because the average social insurance benefit

is higher. In-kind transfers, which include benefits from both social insurance and public assistance programs, have a smaller antipoverty impact than cash social insurance, and a much larger impact than cash public assistance transfers.

Poverty Deficit

The incidence of poverty reveals the percentage of persons whose incomes fall below the poverty threshold, but does not distinguish the degree of poverty. The "poverty deficit," which measures the total amount of income required to bring every poor person up to the poverty threshold, does distinguish between poor persons who are very close to being nonpoor and those who are farther away from the thresholds. Table 3 shows the pretransfer (column 1) and posttransfer (column 3) poverty deficits in billions of current dollars for selected years between 1967 and 1982. Cash transfers received by the pretransfer poor are shown in column 2. The fourth column shows the percentage reduction in the poverty deficit due to these cash transfers. The fifth column shows the posttransfer poverty deficit as a percentage of GNP. The bottom panel shows the percentage growth in current dollars for these concepts.

Between 1967 and 1979, total cash transfers to the pretransfer poor grew faster than the pretransfer poverty deficit, so the posttransfer deficit grew more slowly. Between 1979 and 1982, the pretransfer deficit grew faster than did transfers. As a result, the posttransfer deficit grew more rapidly than the pretransfer deficit. This deficit declined from 1.29 percent of GNP in 1967 to

1.02 percent in 1979, and then increased rapidly until it was about 1.47 percent of GNP in 1982. The 1982 pretransfer poverty deficit of \$114.9 billion means that the pretransfer income of the typical poor household is about \$4540 below the poverty line; the posttransfer deficit of \$45.3 billion means that the posttransfer poor are about \$3200 below the line. These data reinforce the points made above, that poverty has been increasing and the antipoverty impact of transfers has been decreasing in recent years.

Demographic Differences

Table 4 highlights the differences in poverty levels and trends for several major demographic groups for the 1967-79 period. It also shows the effect of in-kind transfers on each group in 1979, the last year for which detailed data on the receipt of in-kind transfers are available. The largest reduction in poverty for the twelve year period, and the largest impact of in-kind transfers in 1979, are for elderly persons. For example, between 1967 and 1979 poverty declined by about 20 percent for all persons, but by about 50 percent for the elderly. And, in 1979, in-kind transfers reduced poverty for all persons by about 42 percent, but by almost 70 percent for the elderly. Adjusted poverty rates in 1979 for blacks, persons of Spanish origin, and female household heads remain above the official rates that existed for whites in 1967, when in-kind transfers had little impact.

Table 5 shows the composition of pretransfer poor households in column (1) and posttransfer poor households in column (2). Each

poor household has been placed into one of the eight categories shown. That the direct effects of economic growth on poverty for all persons are not large should not be surprising, as only about one third of those who are poor before the receipt of transfers can be expected to work. The remaining two thirds - the aged, female-headed households with children under six, students, and the disabled - are likely to remain dependent upon public programs.

A comparison between the pretransfer and posttransfer poor shows the relative success of cash transfers in relieving poverty among the aged who are about 43 percent of the pretransfer poor and only about 22 percent of the posttransfer poor. There are also significant differences in the composition of the poor by race. The major difference is that while 12.61 percent of all posttransfer poor households are headed by women with children under six, the corresponding percentage for blacks is 22.46 (data not shown).

Conclusion

Poverty, no matter how measured, has increased in recent years. In addition, while the antipoverty impacts of income transfers have declined, they still significantly reduce poverty. Transfers also protect against income losses due to unemployment, retirement, disability, and death, and guarantee access to minimum levels of food, shelter, and medical care. The growth in transfers has been accompanied by some declines in work effort and savings that may have contributed to sluggish economic performance, but the magnitude of these declines is estimated to be small (see Danziger, Haveman

and Plotnick, 1981). While reductions in poverty through increased market incomes has always been the primary stated goal of antipoverty policy, increased cash and in-kind transfers have been major factors in the reductions in poverty that have occurred in the past 15 years. If our projections of the effects of economic growth on poverty (Gottschalk and Danziger, 1983) are accurate, then further reductions in transfer benefits will lead to higher levels of poverty, however measured.

FOOTNOTES

1. The specifics of this measure are as follows. Each family's current money income is divided by its official poverty line. This yields a "welfare ratio" that indicates the fraction by which the family's income exceeds or falls below the official poverty line. Families with the same welfare ratio are assumed to be equally well-off. The relative poor are defined as those families with welfare ratios below .44 of the median ratio. The fraction .44 was not an arbitrary choice. In 1965, the base year for this analysis of changes in poverty, the median welfare ratio was 2.25. All living units with incomes below the official poverty lines had, of course, welfare ratios less than one. Thus, any household that in 1965 was poor under the official definition necessarily had a welfare ratio less than $1.00/2.25$ of the median. Defining the relative poor as those with welfare ratios below $1.00/2.25 = .44$ of the median yielded, in 1965, the same group of households as were poor from the absolute perspective.
2. The adjusted income data are not compared to the relative poverty line. Estimating in-kind income from private sources (e.g., fringe benefits) and taxes paid by the nonpoor poses measurement problems that have not yet been solved. Thus, we could not compute a relative measure based upon the median adjusted income.
3. The antipoverty impacts of seven cash and three in-kind transfer programs are assessed here. They are (1) Social Security and Railroad Retirement, (2) Medicare, (3) federal, state and local government employee pensions, (4) unemployment insurance, (5) worker's compensation, (6) veteran's compensation and pensions, (7) Supplemental Security Income, (8) public assistance (AFDC, AFDC-U, General Assistance and, prior to 1974, OAA, APTD, and AB), (9) Food Stamps, and Medicaid. While several in-kind transfer programs and all expenditures on public education have been omitted, Food Stamps, Medicare, and Medicaid alone account for over 80 percent of all federal in-kind transfers. For 1976, and the estimate for 1982, School Lunch and Public Housing benefits are also included.
4. Pretransfer income is calculated by subtracting government transfers from posttransfer income. While this definition assumes that transfers elicit no behavioral responses, transfers do induce labor supply reductions. As a result, recipients' net incomes are not increased by the full amount of the transfer and the pre/post comparisons made here will provide upper-bound estimates of the antipoverty effects of transfers.

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Table 1: The Trend in the Incidence of Poverty Among Persons,
Selected Years 1965-1982

Type of Measure, Year	Pretransfer Income (1)	Prewelfare Income (2)	Posttransfer Income (Census Money Income) (3)	Adjusted Income ^a (4)
Official Measure				
1965	21.3%	16.3%	15.6%	12.1%
1968	18.2	13.6	12.8	9.9
1972	19.2	13.1	11.9	6.2
1974	20.3	13.1	11.6	7.2
1976	21.0	13.1	11.8	6.7
1978	20.2	12.6	11.4	n.a.
1979	20.5	12.9	11.7	6.1
1980	21.9	14.2	13.0	n.a.
1981	23.1	15.1	14.0	n.a. ^b
1982	24.0	15.9	15.0	8.8 ^b
% Change				
1965-1978 ^c	-5.2	-22.7	-26.9	-49.6
1978-1982 ^c	+18.8	+26.2	+31.6	+44.3
Relative Measure				
1965	21.3%	16.3%	15.6%	n.a.
1968	19.7	15.3	14.6	n.a.
1972	22.2	n.a.	15.7	n.a.
1974	22.9	16.1	14.9	n.a.
1976	24.1	16.3	15.4	n.a.
1978	23.9	16.5	15.5	n.a.
1979	23.8	16.6	15.7	n.a.
1980	24.5	16.9	16.0	n.a.
1981	25.5	17.8	16.9	n.a.
1982	26.5	18.5	17.8	n.a.
% Change				
1965-1978	+12.2	+1.2	-0.6	n.a.
1978-1982	+10.9	+12.1	+14.8	n.a.

Source: Unless noted otherwise, the data are computations by the author from the Survey of Economic Opportunity (for 1965) and various March Current Population Surveys (for other years).

^aAdjusted income data are from Timothy Smeeding (1982).

^bThis is an estimate from Gottschalk and Danziger (1983).

^cPercentage changes for adjusted income data are from 1965-1979 and 1979-1982.

n.a. - not available.

Table 2: The Antipoverty Effectiveness of Major Income Transfers, Selected Years, 1965-1982

Poverty Measure	Percentage of the Pretransfer Poor Persons Removed from Poverty by:			
	Cash Social Insurance Transfers ^a	Cash Public Assistance Transfers ^b	In-Kind Transfers ^c	All Transfers
Absolute Measure				
1965	23.5%	3.3%	16.4%	43.2%
1976	37.6	6.2	28.1	71.9
1978	37.6	5.9	n.a.	n.a.
1980	35.2	8.5	n.a.	n.a.
1982	33.8	3.8	25.8 ^d	63.3 ^d
Relative Measure				
1965	23.5	3.3	n.a.	n.a.
1976	32.4	3.7	n.a.	n.a.
1978	31.0	4.2	n.a.	n.a.
1980	31.0	3.7	n.a.	n.a.
1982	30.2	2.6	n.a.	n.a.

^aCash social insurance transfers include social security, railroad retirement, unemployment compensation, workmen's compensation, government employee pensions, and veteran's pensions and compensation.

^bCash public assistance transfers include AFDC, SSI (OAA, APTD and AB in 1965), and general assistance.

^cIn-kind transfers include Medicare, Medicaid, Food Stamps, and, for 1976, School Lunch and Public Housing; this figure also adjusts for direct taxes and the underreporting of cash transfers.

^dBased on estimate for adjusted income poverty 1982.

n.a. - not available

Table 3: Poverty Deficit Before and After Cash Transfers, Selected Years, 1967-1982

Year	Pretransfer Poverty Deficit ^a (1)	Cash Transfers Received by Pretransfer Poor Households ^a (2)	Posttransfer Poverty Deficit ^a (3)	Percentage Reduction in Poverty Deficit Due to Cash Transfers (4)	Posttransfer Poverty Deficit as a Percentage of GNP (5)
1967	\$22.6	\$17.5	\$10.0	55.5%	1.29
1974	45.0	57.3	15.1	66.4	1.04
1979	70.5	80.0	23.9	66.0	1.02
1980	88.9	95.9	31.4	64.6	1.22
1981	104.1	109.0	39.3	62.2	1.37
1982	114.9	118.1	45.3	60.5	1.47

% Increase					
1979/1967 ^b	211.9	357.1	139.0	---	---
1982/1979 ^c	63.0	47.6	89.5	---	---

Source: Computations by author from various March Current Population Survey data tapes.

^aBillions of current dollars.

^bBetween 1967 and 1979, the Consumer Price Index increased by 117 percent.

^cBetween 1979 and 1982, the Consumer Price Index increased by 33 percent.

Table 4: Alternative Measures of the Incidence of Poverty: Official Measure for 1967 and 1979 and Money Income Plus the Market Value of In-Kind Transfers for 1979

Persons Living in Poverty, by Type of Household Head	Official Measure 1967 (1)	Official Measure 1979 (2)	Percentage Decline in Poverty between 1967 and 1979 (3)	Money Income Plus In-Kind Transfers at Market Value 1979 ^a (4)	Percentage Decline in Poverty Due to In-Kind Transfers, 1979 (5)
All Persons	14.2%	11.1%	21.8%	6.4%	42.3%
White	11.0	8.5	22.7	5.2	38.8
Black	39.3	30.4	22.6	15.1	50.3
Hispanic	n.a.	21.4	n.a.	12.0	43.9
Female Householder, No Husband Present	40.6	34.8	14.3	17.6	49.4
Elderly (65 and over)	29.5	14.7	50.1	4.5	69.4

Sources: For 1979, U.S. Bureau of the Census, Alternative Methods for Valuing Selected In-Kind Transfer Benefits and Measuring Their Effects on Poverty, Technical Paper #50 (Washington, D.C.: U.S. Government Printing Office, 1982). For 1967, U.S. Bureau of the Census, Money Income and Poverty Status of Families and Persons in the United States: 1982, Series P-60, No. 140 (Washington, D.C.: U.S. Government Printing Office, 1983).

^aIn-kind transfers for food, housing and medical benefits.

n.a. - not available

Table 5: Composition of Households with Incomes Below the Poverty Line, Official Measure, 1982

Percentage of Poor Households Where head is:	Pretransfer Poor (1)	Posttransfer Poor (2)
Over 65 years of age	43.31%	22.01%
Female, with children under six	7.74	12.61
Student	4.08	6.56
Disabled	10.01	11.09
Persons working full-time, full year	8.51	13.07
Single persons working less than full-time, full-year	10.52	14.78
Male family head, working less than full-time, full-year	10.31	11.95
Female family head, no children under six, working less than full-time, full-year	5.54	7.92
Total	<u>100.00</u>	<u>100.00</u>
Number of households millions	25.3	14.2

Source: Computations by author from March 1983 Current Population Survey data tape.

Note: Classification is mutually exclusive and is hierarchical: Any household head who fits in more than one category has been classified only in the one closest to the top of the table.

POVERTY AMONG MINORITIES IN WISCONSIN

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Nearly nine percent of Wisconsinites were below the poverty level in 1979. This amounted to about 400,000 persons statewide. Of that 400,000, about 74,000 were either black, American Indian, Asian and Pacific islanders, or of Spanish origin. Thus, it appears that only a small number of Wisconsin's "minority" peoples were below poverty. However, these groups accounted for 20 percent of those below poverty, while they comprise only 6.5 percent of the population. Poverty rates among minority groups were 29 percent for blacks, 23 percent for American Indians, 21 percent for Asian and Pacific islanders, and 19 percent for hispanics, compared with less than nine percent for the population as a whole.

This paper examines poverty among minority groups in Wisconsin, as of the 1980 Census. It starts with a look at the distribution of poverty across the State for both the total population and minorities. Next, detailed measures of poverty are presented for minorities and the total population to show some of the sources of the differentials among groups. As a crude attempt to trace the causes of these differentials, several measures of socioeconomic status are presented for the groups. Finally, some estimate of trends over time is made.

County Poverty Levels

Table 1 and Figures 1 through 6 show poverty rates for the total population and the four minority groups. In Figure 1, for the total population, it is clear that the lowest rates of poverty occur in the predominantly metropolitan southeastern third of the State. County poverty rates in this area are mostly below 7.5 percent, with the exception of Brown, Dane, and Walworth counties, which are below ten percent, and Milwaukee county, which is slightly above ten percent. The highest rates of poverty in the State occur in the predominantly rural northern and western counties. Several counties - Menominee, Forest, Clark, Sawyer, Burnett, and Dunn - have over 15 percent of their populations below poverty. Dunn, with the dominant presence of the University of Wisconsin-Stout, is something of a special case. In addition to being fairly rural, it has the effect of college students who live off campus with relatively low incomes. While such students are usually not in dire need, they do show up in the poverty population of any county with a substantial college population.

In Figure 2, a somewhat different picture emerges. If the number of people below poverty is considered, instead of the rate, urban counties clearly have a higher concentration of poverty. The four counties which fall into the highest category of number below poverty account for 40 percent of the poverty population, or 150,000 people. Milwaukee alone accounts for 96,000 poor, while Dane has 29,000 (a student effect there, too), Brown has 13,000, and Racine 12,000. If the top ten counties in number of poor are combined,

they account for half of the State's poverty population. Outside the metropolitan southeast, there are six counties in north-central Wisconsin, along with La Crosse and Grant counties, with over 5,000 poor.

Wisconsin poverty rates for the total population do not differ much from those of the nation, where relatively high rates of poverty are found in rural areas, little poverty in the suburbs of large cities, and high rates in the central cities. In terms of absolute numbers, however, poverty is much more of an urban phenomenon.

Next, the distribution of minority poor populations across the State's counties will be considered, and distinct patterns will be apparent for each group. For each minority group, only those counties with more than 400 of that group will be considered. For purposes of identifying poor populations, even 400 people is a very small group to consider since poverty is measured only for a sample of between 16 and 50 percent of households. Some counties with potential sample variation problems will be mentioned below. Note that the shading categories for the minority maps have had to be changed from the range of under 7.5 percent below poverty to 12.5 percent or over for the total population in Figure 1, to categories which increment by ten, from under ten percent to 30 percent or over, since minority poverty rates are so much higher than those of the total population.

Figure 3 shows the black population of the State, which is highly concentrated in the five counties with the most dense

shading. There are about 177,000 blacks in Wisconsin, and 51,000 of them are below the poverty level, for a poverty rate of 29 percent. First among the counties is Milwaukee, with a poverty rate of virtually 30 percent, and 80 percent of the State's blacks below poverty. Dane county also has a black poverty rate of about 30 percent, while Racine, Kenosha, and Rock counties are between 20 and 25 percent. Waukesha and Ozaukee counties both have small, relatively prosperous black populations, with poverty rates below five percent. These small populations are likely to yield unreliable sample estimates. Overall, the black population is highly concentrated in a few counties, and has very high poverty rates.

The next largest minority population in Wisconsin is the Spanish origin group. This group can be of any race, but generally about 60 percent report themselves as white, and 40 percent as "other" race. There are 63,000 Spanish origin people in the State, and 11,000 of them are below the poverty level, for a poverty rate of about 21 percent. The Spanish origin population represents a mix of fairly recent migrants who are still trying to establish themselves economically, and some well-established groups who have been in the United States for several generations. It should also be noted that these data do not reflect the influx of Cubans to the State and nation, as that occurred just after the census was taken. About half of all hispanics in the State live in Milwaukee county, and their poverty rate is the same as that for the State, 21 percent (see Figure 4). Another 30 percent of hispanics live in Dane,

Racine, Kenosha, Walworth, Waukesha, and Sheboygan counties. Dane, Racine, Kenosha, and Walworth counties have poverty rates of about 20 percent. Waukesha's suburban population has a poverty rate of under seven percent. Of the other counties shown on the map, all have relatively small populations of hispanics, some of which represent "settled out" migrant workers.

Another highly urbanized group is the Asian and Pacific population. There is variation in their poverty rates for the same reasons which apply to hispanics. The Asian and Pacific population is a mixture of all peoples from Asia and any Pacific Ocean island. Among these groups are Japanese and Chinese, who are entrenched, highly integrated, and highly educated, and recent Southeast Asian immigrants who often have just the opposite characteristics, with associated high poverty rates. Thus, the poverty rate which is shown in overall Asian and Pacific measures represents an average of groups with both high and low rates of poverty. As was the case with the Cuban influx after the census, many of the Southeast Asian refugees who are in Wisconsin today were not here on census day.

As of 1980, there were 21,000 Asian and Pacific islanders in the State, and 4,500 of them were below the poverty level, yielding a poverty rate of 21 percent. Figure 5 shows a range from very low poverty rates in suburban Waukesha county to the 39 percent rate for Brown county. Unlike blacks, the Asian population is spread throughout the major metropolitan areas of the Southeast. However, Milwaukee and Dane counties still account for 55 percent of poor Asians.

American Indians, as shown in Figure 6, are split between urban counties and rural ones which have reservations or other significant settlements. They are the largest minority group in northern Wisconsin, although about 40 percent of their 29,000 total population live in major metropolitan areas. Poverty rates in four of the reservation counties are above 30 percent, reaching 40 percent in Forest county. Most other counties with over 400 American Indians have poverty rates above 20 percent, with the exception of suburban Waukesha county, metropolitan Dane and Outagamie counties, and Shawano county.

Overall, the distribution of minorities below the poverty level is predominantly urban and metropolitan, except in the case of indian reservation counties, and some counties with settled out hispanic migrant workers. This is not surprising, since the vast majority of Wisconsin minority people live in urban areas.

In order to discover what is behind the disproportionate levels of poverty among Wisconsin minorities, poverty will be measured next for several specific sub-groups of the total population and minorities.

Detailed Poverty Measures

Not only is poverty concentrated among minorities in Wisconsin, but there are specific groups within minorities who suffer even higher rates. Table 2 shows measures which apply to these groups.

The most basic measure in Table 2 appears at the bottom of the table - the percent of persons below various specified poverty

levels. Poverty is determined for each family or unrelated individual according to how their income compares to an income threshold specific to their type and size of household. Those who are below their poverty threshold appear in the category with the asterisk "Below 100 Percent" of the poverty level. Increasing or decreasing the income thresholds by specified amounts yields the other categories shown.

Those below 75 percent of poverty could be construed as the very poor. At this level are found only five percent of the total population, compared with 17 percent of blacks and Asians, 14 percent of indians, and twelve percent of hispanics. Doubling the poverty thresholds yields the "Below 200 percent" category. Only a quarter of the total population has incomes below this level, but over one half of blacks, nearly 60 percent of indians, and about 40 percent of Asians and hispanics are below these thresholds. Blacks, therefore, have a significant proportion of very poor. In addition, fewer than half of all blacks are above twice poverty. Indians, while they have a lower proportion of the very poor, have only 40 percent of their population above twice poverty. Asian and Pacifics, and hispanics, reflect the diversity of their groups mentioned above, with both significant proportions of very poor, and higher proportions who are above twice poverty.

Poverty rates for families are shown in the top panel of Table 2, along with the mean deficit below poverty. Families, as defined by the census, are any group of two or more people who are related and living in a household. People who are living alone, or with

nonrelatives, are referred to as unrelated individuals. Family poverty patterns by race are about the same as those for the total population, except a little lower. This is due to the higher likelihood that a family grouping will have at least one person in the labor force.

The mean deficit figures for families measure just how far a family is below its poverty threshold income, on average. For the total population, this deficit is about \$2,800. Most groups are near that figure, with the exception of Asian and Pacifics. Their deficit for families who are below poverty is \$4,700. Thus, most of the Asian and Pacific poor are very poor; indeed the bottom panel of the table reflects this, since 17 of the 21 percent of those below poverty are below 75 percent of their threshold. Blacks also have a high proportion who are very poor, and, given their greater numbers, they account for the majority of the very poor. However, they also have a significant proportion of their population (eleven percent) between 75 and 100 percent of poverty, thus reducing the average income deficit of all blacks below poverty.

The feminization of poverty is the topic of another paper in this collection, however, it is so important for poverty patterns by race that it bears mention here. The second panel of Table 2 shows poverty rates of female-headed families. Over one quarter of all female-headed families are below poverty, a rate which is not small. However, for all minority groups except Asians, the rate approaches one half! Most of the families which are female-headed have children, as the next line shows. Of those with children, the

poverty rate is 35 percent for the total population, 44 percent for Asians, and over 50 percent for all the other groups.

For blacks, these patterns are of particular significance. Over 30 percent of the female-headed families below poverty in Wisconsin are black families, although the State is only 3.8 percent black. Thus, blacks account for eight times the number of female-headed poor families than they would if their patterns were the same as the total population. Of black families below poverty with children, over 80 percent of them are headed by women. Among other minorities, particularly Asians and hispanics, female-headed families account for many fewer of those below poverty.

Another significant group to examine when considering poverty is children. The feminization of poverty has been accompanied to a large extent by increases in the poverty of children. Presumably, growing up in a family which has an income below poverty will limit the opportunities which children have. The next panel of Table 2 shows poverty status of all children in families, regardless of the sex of the family head. Children of minority families are below the poverty level at two to four times the rate of all children in Wisconsin. About 20 percent of hispanic and Asian children are below poverty, 27 percent of indians, and nearly 40 percent of blacks.

The final group to be considered is the somewhat amorphous unrelated individuals. This group is comprised largely of elderly people, many of them widows, but also includes young people who either live alone, with roommates, or cohabit. Poverty rates for

these groups are generally higher than those of the total population, for several reasons. First, fewer of the elderly have income from jobs, although increases in several transfer payment programs have pushed many elderly from below to above poverty thresholds. Second, the young unrelated individuals are often college students living off campus with apparently low incomes. Finally, the young who are in the labor force are subject to higher rates of unemployment and lower levels of pay than others. For the total population and all minority groups but blacks, Table 2 shows that unrelated individuals in the State do have higher poverty rates than families.

While these measures have yielded some insight into the roots of poverty among minorities, particularly those related with family structure, the causes likely lie elsewhere. The next section will explore causes in simple terms of the comparative socioeconomic status of minorities and the total population.

Socioeconomic Status

The three basic measures of socioeconomic status are income, occupation, and education. For the measurement of poverty, income which often results from the other two, is important. Table 3 shows income of households, which, like poverty status, reflects the 1979 income of those who lived in the State as of April 1980. The lowest median income (i.e., the income which represents the middle case) among these groups accrues to indians and blacks at about \$12,400. Asians and hispanics, again probably reflecting their mixed

composition, had somewhat higher medians, at about \$15,000. These compare with the median for the total population of about \$18,000. Mean, or average, incomes reflect the same patterns.

It is at the low and high end of the income distributions that differences are most apparent. Eleven percent of all households have incomes below \$5,000, while about 20 percent of blacks, indians, and Asians have incomes below that level, along with 14 percent of hispanics. About one quarter of all households have incomes below \$10,000, compared with 40 percent of blacks, indians and Asians. At the high end of the scale, above \$50,000, four percent of all households are found, compared with only two percent of blacks and one percent of indians. The diverse Asians and hispanics are again obvious with their high proportions at this income level, with Asians exceeding the level of the total population.

Next to be considered is labor force status, in Table 4. The most basic measure is the proportion of the groups in the labor force, that is, those who have a job or are actively seeking one. About 65 percent of the total population, and hispanics, are in the labor force, along with about 60 percent of the other groups, which is not a large difference. Significant differences occur when unemployment rates for census week are examined, reflecting the proportion of those in the labor force who do not have jobs. For the total population, this rate is under seven percent; it is over double that for blacks and indians, and eleven percent for hispanics. Asians are lower than the total population. When the

proportion experiencing any unemployment in the previous year is examined, the comparisons are similarly stark. A quarter of hispanics, 30 percent of blacks and over 35 percent of indians who were in the labor force experienced some unemployment in 1979. When these groups experienced unemployment, it was for a longer duration than for the total population. With one third of their labor force experiencing unemployment which lasted an average of four months, it is not surprising that many blacks and indians are poor.

Occupation, the lower panel of Table 4, reflects a similar lack of opportunity for those who were actually working at census time. Low proportions of minority groups (except Asians) are in the highly-paid professional and managerial occupations, and high proportions are in the lower-paid operator, fabricator, and laborer occupations.

Table 5 shows the final socioeconomic status dimension through three measures of education - percent high school graduates, median education, and dropout rates. In terms of completing high school, all groups but Asians are behind the level of the total population. Hispanics, who include many recent migrants, have about 45 percent high school completion, and blacks and indians have about 55 percent, well behind the total population level of 70 percent. Median years of education reflect similar differentials. While education levels are rising for minorities due to the higher proportion of young people finishing high school and their relatively young age structure, median levels still lag behind the total population. Also, the problem of school dropouts is still

very real, despite rising averages. The lower panel of table 5 shows that 20 to 25 percent of blacks, indians, and hispanics between age 16 and 19 are not enrolled in school, and do not have a high school diploma.

Across measures of socioeconomic status, therefore, it is obvious that there are significant hurdles for minorities to clear before eliminating differences in poverty. In terms of income, labor force participation, unemployment, occupation, and education there are significant differences between Wisconsin minorities and the rest of the State's population. The one exception to these patterns occurs among Asian and Pacific islanders, many of whom enjoy relatively high socioeconomic status, but many others of whom are not similarly advantaged.

These factors, together with family structure differentials, contribute much to the observed differences in poverty levels. The last question to be asked is whether there is improvement or degradation in the status of these groups compared to the total population over time. That is, is poverty getting better or worse for minorities?

Trends Over Time

Trend data can be examined only for blacks and indians due to changing definitions of the other groups between the 1970 and 1980 censuses. As Sheldon Danziger's paper (Alternative Measures of the Recent Rise in Poverty) indicates, poverty rates went down from 1970 to 1978, and turned up since that time. Given that this analysis is limited to the 1970 and 1980 censuses, the observed trend over that

ten-year period is downward. According to official statistics, indians did share in that reduction in poverty rates. Among blacks, however, poverty went up. In 1970, 24.4 percent of black families were below poverty; in 1980 that figure had risen to 27.6. While the rate of poverty among both female-and male-headed black families went down slightly, the number of female-headed families increased tremendously, as did the number of such families below the poverty level, causing the overall rise.

Another way to measure the progress of all black families is to compare their median incomes with that of Wisconsin's total population over the past 20 years. In 1960, nonwhite (mainly black) median family income was 78 percent of the total median income; in 1970 the comparable figure was 75 percent, and by 1980 it had dropped to 64 percent. This figure is also affected by changing family structure, but it is nonetheless significant since these are the conditions under which blacks in Wisconsin live. Thus, there has been very little progress toward equality for blacks as measured by poverty or median income.

It is clear that there is a concentration of poverty among minorities in Wisconsin. This concentration occurs at three times the rate that would be expected if all groups experienced the same rates as the total population. In the case of some significant subgroups of the population, such as female-headed black families, the concentration occurs at fully eight times the rate extant among the total population. With such differences, it is not surprising that there has been little progress toward reduction of poverty among minorities in the state.

Figure 1: Percent Below Poverty Level, Total Population, 1979

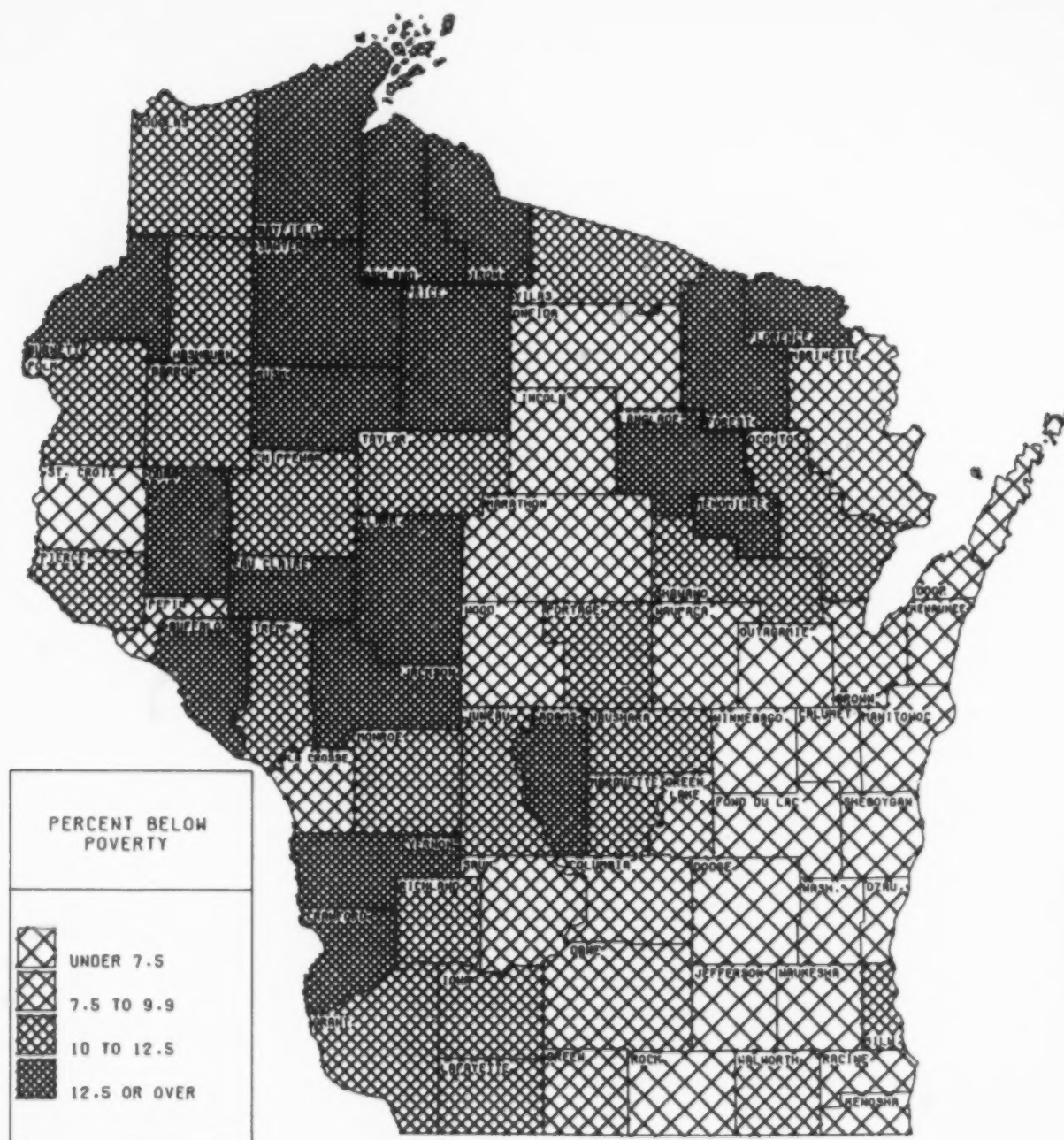


Figure 2: Number Below Poverty Level, Total Population, 1979

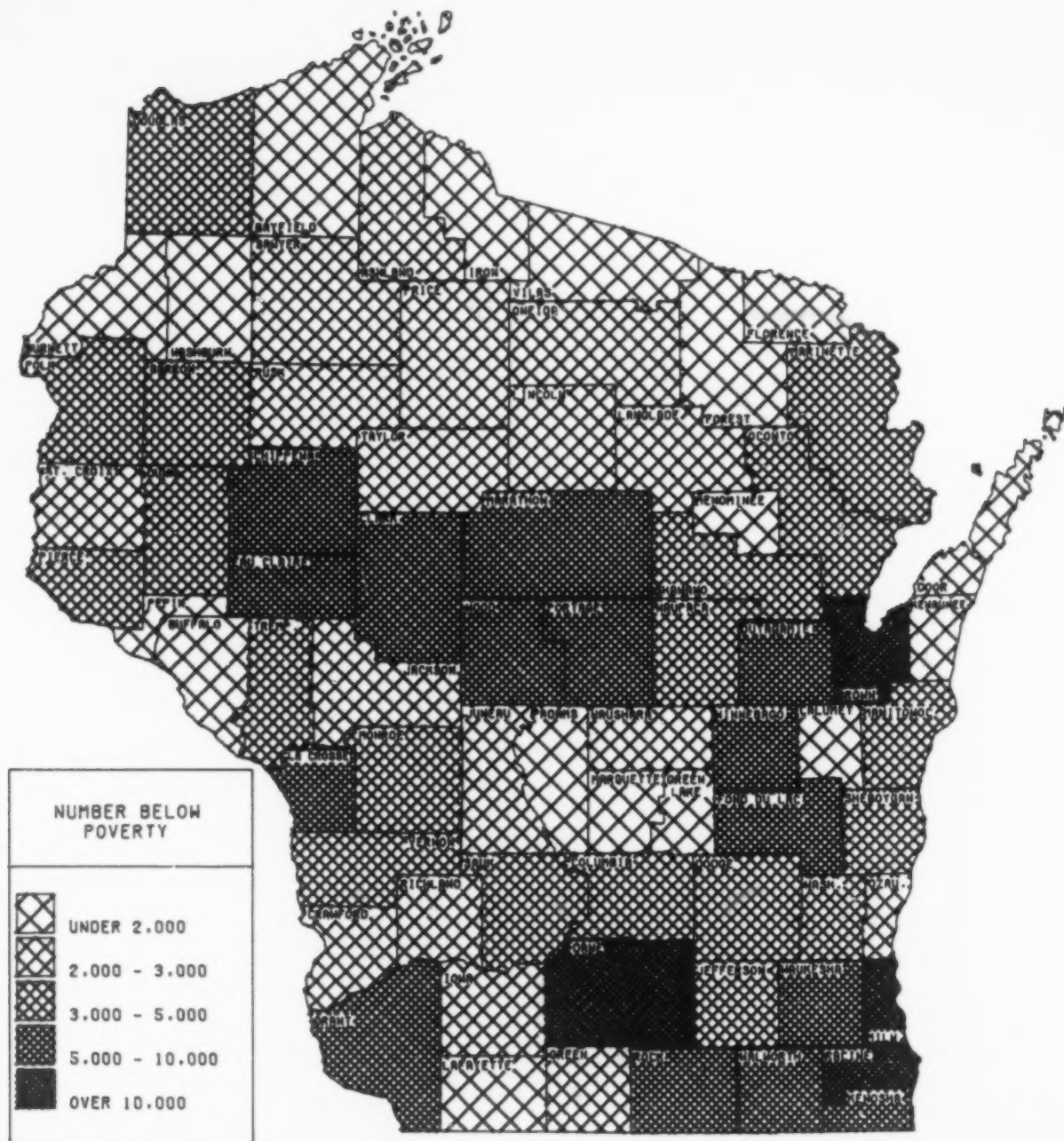


Figure 3: Percent Below Poverty Level, Black Population, 1979

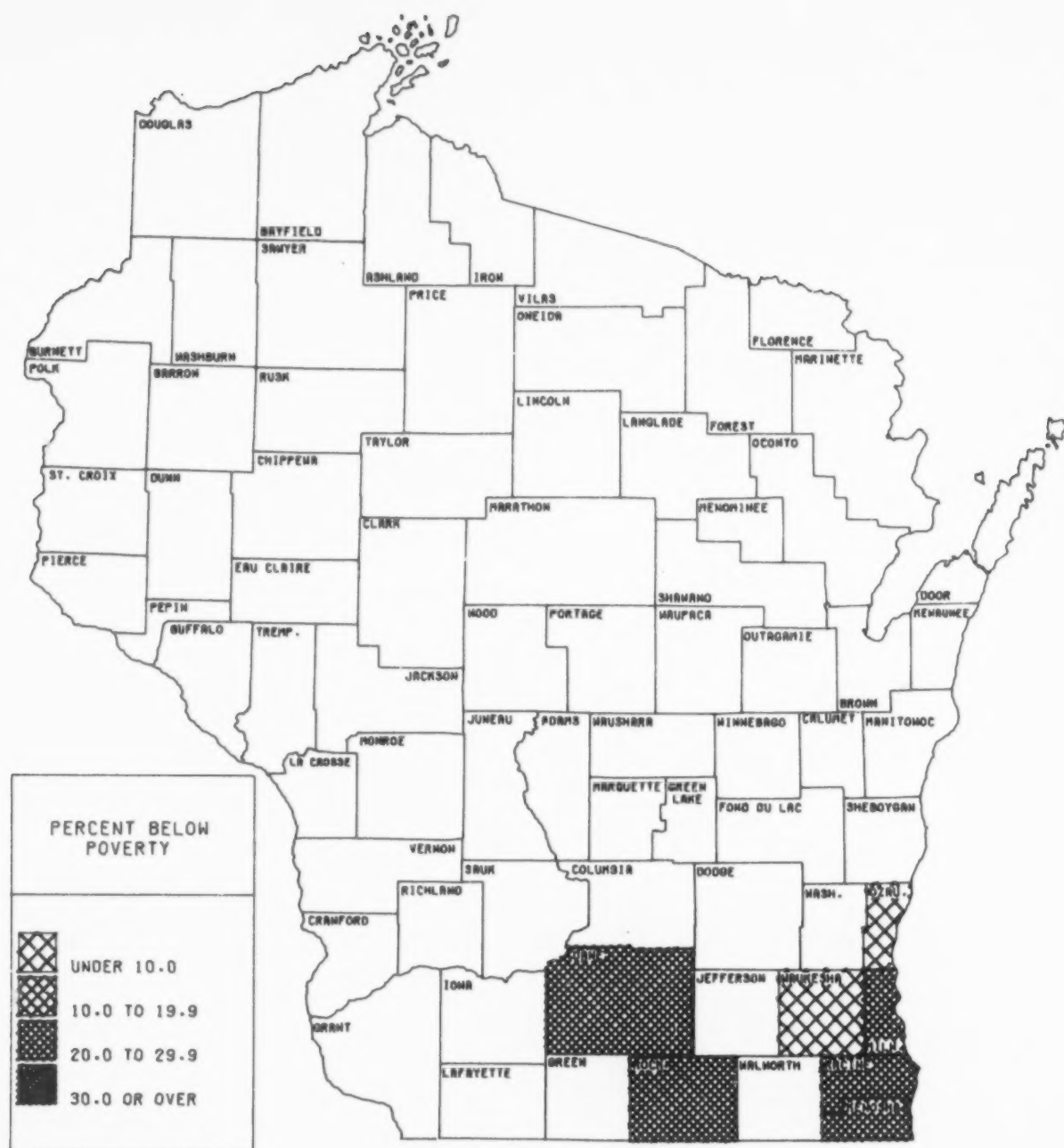


Figure 4: Percent Below Poverty Level, Spanish Origin Population, 1979

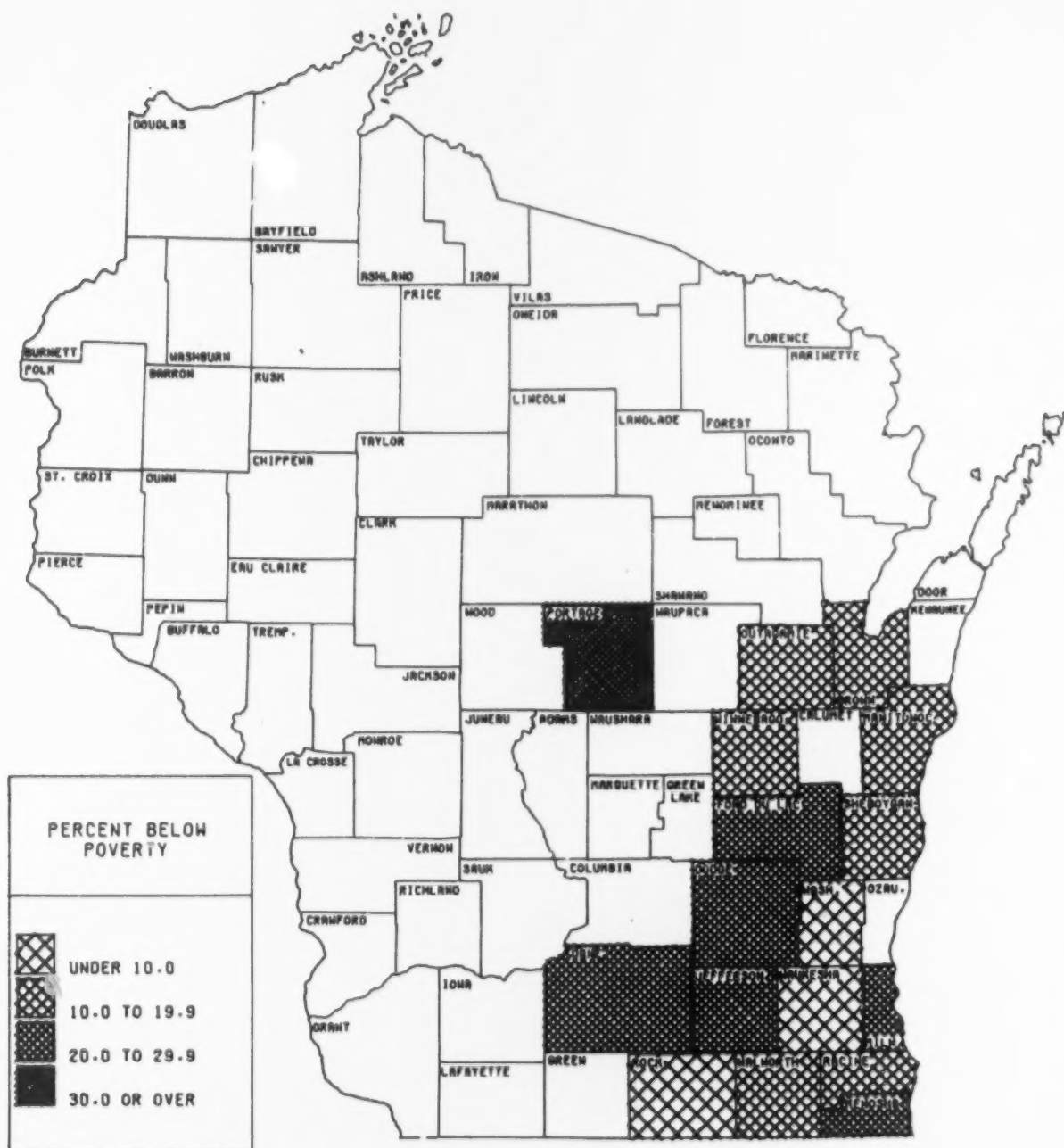


Figure 5: Percent Below Poverty Level, Asian and Pacific, 1979

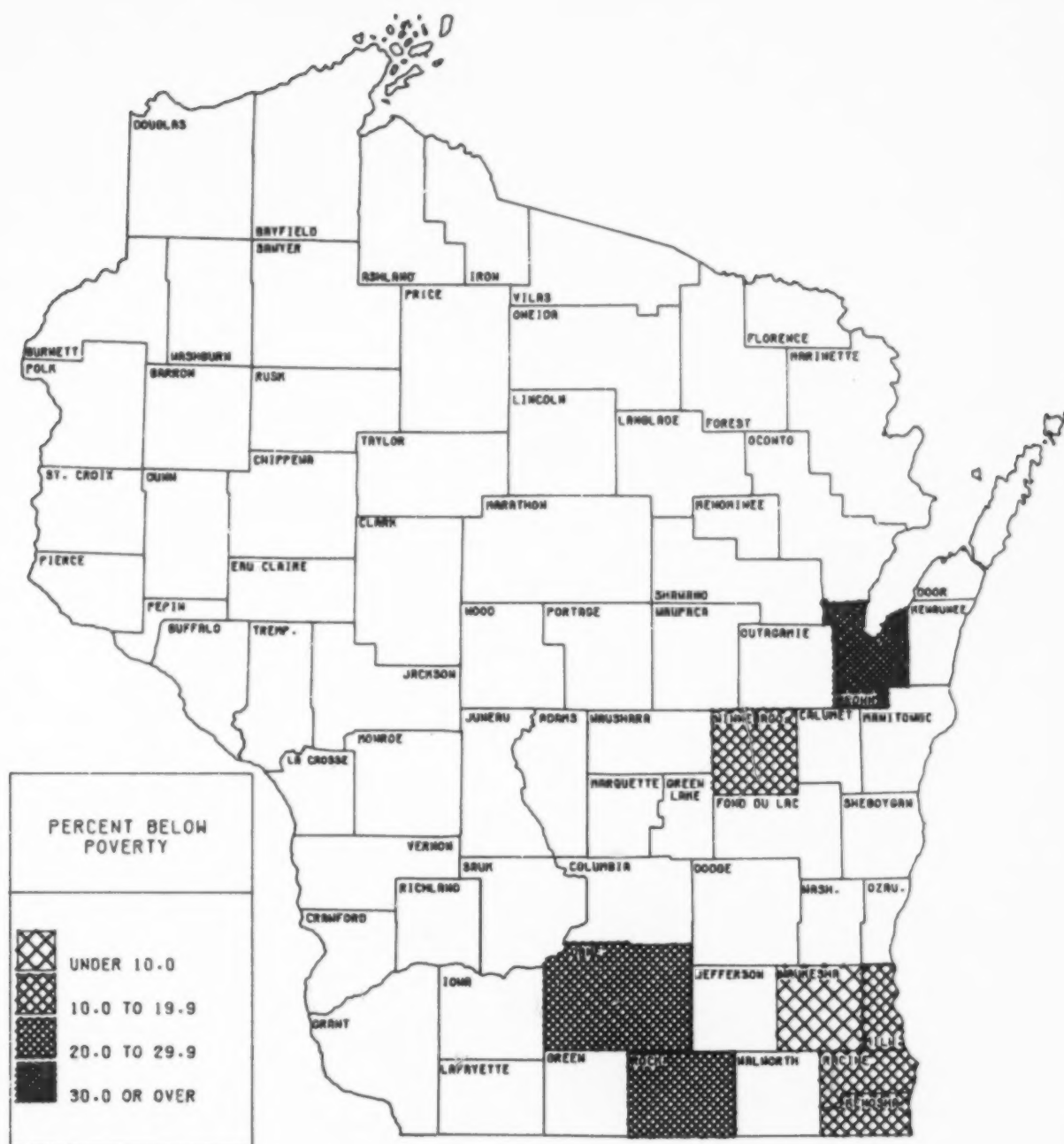


Figure 6: Percent Below Poverty Level, American Indians, 1979

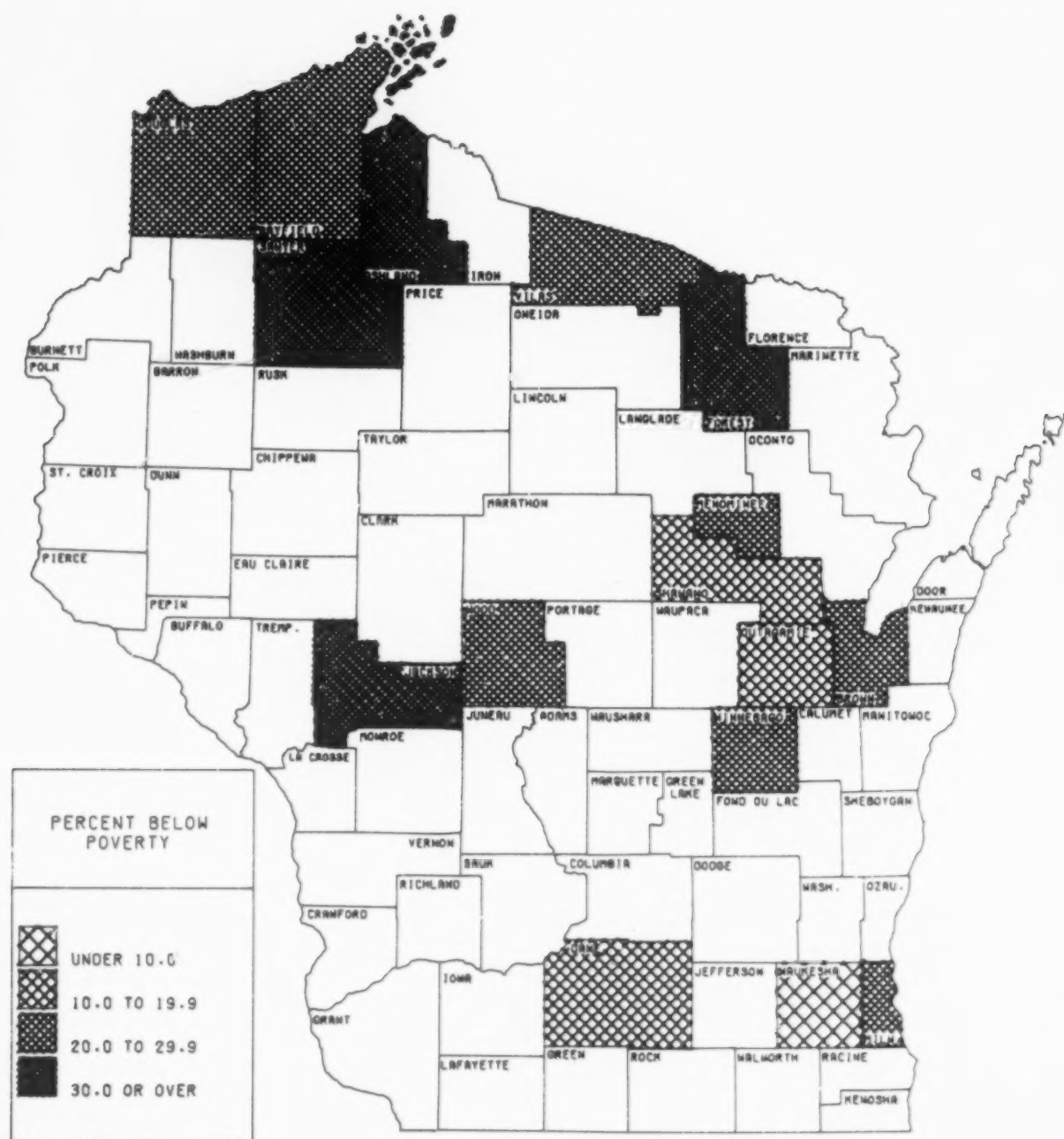


Table 1: Percent of Persons Below Poverty, Wisconsin, 1979

<u>County</u>	<u>Total</u>	<u>Black</u>	<u>Indian</u>	<u>Asian & Pacific</u>	<u>Spanish Origin</u>
Adams	12.9				
Ashland	12.6		31.8		
Barron	11.9				
Bayfield	13.9		21.9		
Brown	7.5		29.8	39.9	14.0
Buffalo	13.5				
Burnett	15.6				
Calumet	4.3				
Chippewa	10.2				
Clark	16.2				
Columbia	7.8				
Crawford	14.2				
Dane	9.7	29.8	19.8	29.6	25.3
Dodge	6.1				20.9
Door	6.9				
Douglas	10.0		26.7		
Dunn	15.8				
Eau Claire	12.9				
Florence	13.8				
Fond du Lac	6.7				23.7
Forest	17.0		41.3		
Grant	12.3				
Green	9.1				
Green Lake	8.5				
Iowa	11.8				
Iron	13.9				
Jackson	13.6		31.3		
Jefferson	6.5				20.8
Juneau	11.6				
Kenosha	7.0	25.8		10.7	21.6
Kewaunee	7.4				
La Crosse	9.9				
Lafayette	11.4				
Langlade	13.2				
Lincoln	9.3				

continued

Table 1 (continued): Percent of Persons Below Poverty, Wisconsin, 1979

<u>County</u>	<u>Total</u>	<u>Black</u>	<u>Indian</u>	<u>Asian & Pacific</u>	<u>Spanish Origin</u>
Manitowoc	5.9				11.1
Marathon	8.1				
Marinette	9.0				
Marquette	11.9				
Menomonie	17.9		20.0		
Milwaukee	10.2	29.7	22.2	18.0	20.6
Monroe	10.1				
Oconto	11.1				
Oneida	8.7				
Outagamie	6.2		13.9		16.2
Ozaukee	3.3	4.3			
Pepin	9.7				
Pierce	11.2				
Polk	10.7				
Portage	11.2				41.3
Price	13.7				
Racine	7.0	24.4		14.5	19.5
Richland	11.8				
Rock	7.2	21.7		20.2	9.7
Rusk	14.2				
St. Croix	6.5				
Sauk	9.4				
Sawyer	16.2		30.5		
Shawano	10.7		18.4		
Sheboygan	4.9				14.4
Taylor	11.6				
Trempealeau	12.1				
Vernon	13.7				
Vilas	11.8		24.4		
Walworth	8.2				18.8
Washburn	12.4				
Washington	4.6				7.4
Waukesha	3.1	0.5	3.6	7.9	6.5
Waupaca	8.7				
Waushara	11.4				
Winnebago	6.7		21.1	17.1	13.1
Wood	7.6		24.0		

Source: 1980 Census of Population, PC80-1-C51, General Social and Economic Characteristics, Wisconsin.

Table 2: Poverty Status, Wisconsin, 1979

<u>Poverty Status</u>	<u>Total</u>	<u>Black</u>	<u>Indian</u>	<u>Asian & Pacific</u>	<u>Spanish Origin</u>
<u>Families Below Poverty Level</u>					
Number	77,140	11,532	1,398	774	2,183
Poverty Rate	6.3%	27.6%	22.3%	18.4%	17.0%
Mean Family Income Deficit (to Pov. Level)	\$2,794	\$3,009	\$2,668	\$4,700	\$3,024
<u>Female Headed Families Below Poverty Level</u>					
Number	33,423	9,502	832	182	1,184
Poverty Rate	25.1%	47.6%	45.7%	34.9%	48.9%
<u>With Children Under 18</u>					
Number	31,266	9,271	819	167	1,144
Poverty Rate	35.2%	52.5%	51.0%	43.5%	53.1%
<u>Related Children Under 18 Below Poverty Level</u>					
Number	139,418	29,057	3,424	1,558	6,053
Poverty Rate	10.4%	38.9%	27.1%	20.8%	22.1%
<u>Unrelated Individuals Below Poverty Level</u>					
Number	12,655	5,824	1,251	1,169	1,980
Poverty Rate	22%	27%	38%	40%	34%
<u>Persons Below Poverty Level</u>					
Number	397,813	51,018	6,896	4,455	11,494
Poverty Rate	8.7%	28.8%	23.2%	20.8%	18.8%
<u>Percent of Persons Below Specified Poverty Level</u>					
Below 75 Percent	5.3%	17.6%	13.8%	17.0%	11.9%
Below 100 Percent*	8.7%	28.8%	23.2%	20.8%	18.8%
Below 150 Percent	16.9%	42.4%	40.5%	30.4%	31.3%
Below 200 Percent	26.7%	53.2%	58.2%	38.9%	45.1%

Source: 1980 Census of Population, PC80-1-C51, General Social and Economic Characteristics, Wisconsin.

Table 3: Household Income, Wisconsin, 1979

Income	Total		Black		Indian		Asian & Pacific		Spanish Origin	
	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent
Total Households	1,654,777	100%	56,605	100%	8,053	100%	5,939	100%	16,015	100%
Less than \$5,000	181,943	11.0	11,917	21.1	1,472	18.3	1,143	19.2	2,176	13.6
\$5,000 to \$7,499	132,773	8.0	6,676	11.8	968	12.0	607	10.2	1,387	8.7
\$7,500 to \$9,999	126,247	7.6	5,275	9.3	770	9.6	418	7.0	1,499	9.4
\$10,000 to \$14,999	248,555	15.0	8,807	15.6	1,494	18.6	810	13.6	2,728	17.0
\$15,000 to \$19,999	249,541	15.1	7,245	12.8	1,279	15.9	615	10.4	2,523	15.8
\$20,000 to \$24,999	230,489	13.9	5,738	10.1	773	9.6	601	10.1	2,199	13.7
\$25,000 to \$34,999	284,956	17.2	6,564	11.6	878	10.9	795	13.4	2,127	13.3
\$35,000 to \$49,999	136,771	8.3	3,411	6.0	313	3.9	499	8.4	998	6.2
\$50,000 or more	63,502	3.8	972	1.7	88	1.1	451	7.6	378	2.4
Median Income	\$17,680		\$12,402		\$12,372		\$14,943		\$15,382	
Mean Income	\$20,382		\$15,525		\$14,652		\$21,653		\$17,797	

Source: 1980 Census of Population, PC80-1-51, General Social and Economic Characteristics, Wisconsin.

Table 4: Labor Force Status, Wisconsin, 1979 and 1980

<u>Labor Force</u>	<u>Total</u>	<u>Black</u>	<u>Indian</u>	<u>Asian & Pacific</u>	<u>Spanish Origin</u>
Number in Labor Force	2,266,079	70,948	11,148	8,895	24,533
Labor Force Participation Rate	64.2%	61.6%	58.5%	59.0%	65.6%
Unemployment Rate	6.6%	13.9%	16.1%	6.3%	10.9%
Percent of Labor Force With Any Unemployment in 1979	17.0%	29.0%	36.3%	15.9%	25.5%
Mean Weeks Unemployed	12.3	17.8	18.1	13.9	13.6
<u>Occupation</u>					
Employed Persons 16 and Over	2,114,473	60,941	9,344	8,321	21,781
Managerial and Professional	20.1%	12.4%	13.4%	36.1%	12.8%
Technical, Sales, and Admin. Support	27.4%	22.2%	20.0%	25.1%	20.8%
Service	14.1%	21.7%	21.0%	16.6%	14.6%
Farming, Forestry, Fishing	5.5%	0.4%	3.6%	1.3%	1.6%
Precision Production Craft, Repair	12.1%	8.1%	12.6%	5.1%	10.8%
Operators, Fabricators, Laborers	20.9%	35.2%	29.5%	15.8%	39.4%

Source: 1980 Census of Population, PC80-1-C51, General Social and Economic Characteristics, Wisconsin.

Table 5: Educational Status, Wisconsin, 1980

<u>Education</u>	<u>Total</u>	<u>Black</u>	<u>Indian</u>	<u>Asian & Pacific</u>	<u>Spanish Origin</u>
<u>Those Age 25 and Over</u>					
Percent High School Graduates	69.6%	54.4%	54.0%	75.4%	45.9%
Median School Years Completed	12.5	12.1	12.1	14.7	11.2
<u>Those Age 16-19 High School Dropouts</u>					
Number	35,993	3,705	812	141	1,459
Percent	9.5%	21.6%	27.5%	10.3%	25.4%

Source: 1980 Census of Population, PC80-1-C51, General Social and Economic Characteristics, Wisconsin.

FEMALE-HEADED FAMILIES IN POVERTY IN WISCONSIN

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In early 1978 an article by Diana Pearce appeared in the Urban and Social Change Review entitled "The Feminization of Poverty."¹ She chose this phrase based on such startling facts as: two out of three poor adults were women, and families with female heads had a poverty rate six times that of male-headed families. These facts pointed out that poverty was becoming more and more a female-oriented issue.

How does Wisconsin fit that pattern? What do we know about its women in poverty? What is being done for these women?

The Feminization of Poverty in Wisconsin

In Wisconsin in 1980 families headed by women represented eleven percent of all families and 13 percent of all families with children less than 18, yet they comprised over 43 percent of all families in poverty and 53 percent of all families with children in poverty. In addition, the number of these families in Wisconsin grew rapidly between 1970 and 1980. Whereas there was a 13 percent increase in the number of all families, there was a 48 percent increase in those headed by women. And while there was a drop in the total number of all families in poverty, there was a 42 percent increase in the number of poor female-headed families.

This increase in the number of poor female-headed families is by and large a result of the increasing number of female-headed families in general, since their poverty rate in both 1970 and 1980 was almost constant, at about 25 percent.² During this same period, however, the rates for non-female-headed families dropped from 5.7 to 4.0 percent. Thus, the poverty rates for female-headed families in Wisconsin is still over six times that of male-headed families.

The growth in the number of these families, and their disproportionate representation among the poor, points out that Wisconsin also faces the issue of the feminization of poverty.

Who Are These Women in Poverty?

For the most part, when poverty among women is the topic of discussion, most of the focus is on female-headed families with children. While this group is the most over-represented among the poor, female-headed households without children make up a significant proportion of the poverty population. Figure 1 presents the incidence of poverty for all female-headed households, categorized by presence of children and age of the head. (It should be noted that there are both family and non-family households included in these numbers. By Census definition, a family is a household which contains at least two related individuals. Thus, women who live alone or with unrelated others are not considered families, but would be included in the number of households without children.)

As can be seen from Figure 1, women without children have poverty rates of 17 percent, less than half that of women with children. The greatest percentage of women heading households without children are aged. The incidence of poverty for this group has been steadily dropping. Furthermore, when we consider the large share of government in-kind transfers which are not counted in the census data - Medicare, Medicaid, and Food Stamps - as well as community subsidies and services the elderly receive, their situation relative to that of nonaged female household heads improves even more. The feminization of poverty is nevertheless an issue for the elderly. While female-headed households account for 58.3 percent of Wisconsin's aged population, they accounted for 70.4 percent of the aged poor.

For non-aged households, the highest incidence of poverty for both household types is for those under age 25. For households with children, this is most likely a consequence of being the single parent of a young child. For households without children it may largely be due to the lower earning power of the young, or the fact that they are students. The 45-60 year-old age category has the next largest incidence of poverty for households without children. This might well reflect the phenomena of the "displaced homemaker" - the divorced, never married, or widowed woman whose primary responsibility had been as wife or mother. These women have sporadic, or non-existent, employment records and thus present a particular challenge to policymakers because no specific income support programs are in place to assist them.

While the greatest share of all non-aged households headed by women are households without children, the highest rates of poverty are for families with children. Figures 2 and 3 present the distribution of these families across various family types and the incidence of poverty within each family type. Table 1 presents information on the number of female-headed families and the incidence of poverty across counties. In Figure 2, families are categorized by marital status, the age of the youngest child and employment status of the mother. Figure 3 categorizes families by marital status and race.

Figure 2 indicates that poverty is lower for women who have been married previously than for those who never married. This is not surprising since never married women are more likely to have younger children and families with younger children have higher poverty rates. This figure also points out that employment lowers poverty, however, even when the mother is employed, the poverty rates for families with young children is alarmingly high.

Another reason that the incidence of poverty is greater for never-marrieds is the large percentage of non-whites in this family type. As can be seen from Figure 3, the poverty rates for non-whites are significantly higher than for whites, and over 52 percent of never-marrieds are non-white compared to only 16 percent of those ever married.

Among never-married women, single parenthood is most often a result of a teenage pregnancy. This sets up a pattern in which the woman drops out of high school, gets on welfare, never marries, or

if marries has a high probability of divorce or separation, remains in the low wage/low skill sector of the economy, and has lifelong reduced economic prospects for herself and her children. Such a pattern not only demands intervention to help those currently poor, but certainly warrants a closer look at ways of preventing the pattern from ever beginning.

In summary, for female-headed families in Wisconsin, being never married, having a young child, being unemployed, and being non-white are all associated with higher poverty rates. Even for those female heads with the lowest poverty rate - those married at some time, employed, and with a child aged 6-17 years - the poverty rate is still almost four times that of male-headed families.

What is Being Done for These Families?

In Wisconsin, over 39 percent of all female-headed families with children received cash public assistance in 1979. Figure 4 presents the distribution of these female-headed families by the age of the youngest child, receipt of welfare, and the mother's employment status. Again we see the impact on the poverty rate of having young children.

Of those who received welfare, 67.7 percent of mothers with children under the age of six are poor and 41.1 percent of mothers with children age 6-17 are poor. The combination of welfare and work reduces this rate to 44.8 and 26.0 percent for each group, respectively.

One important point to be seen from Figure 4 is that, while one often hears complaints about "those lazy welfare mothers out there living off the dole," a large percentage of welfare mothers do work and yet are still unable to escape poverty. In fact, of all those on welfare, 56.4 percent work at least part time and, of these, almost 35 percent are still poor. Among those who work and are not on welfare, over 17 percent remain poor. This again compares to a poverty rate among all male-headed families of only four percent.

Although welfare does not eliminate poverty among female-headed households with children, it does improve the economic well-being of recipients. Table 2 indicates the poverty status of recipient families both pre- and post-cash welfare transfers. (Prewelfare income is total family income in 1979 minus public assistance payments in 1979.) When welfare income is excluded, 71.9 percent fall below .75 of the poverty cutoff, compared to 25 percent when welfare income is included. In addition, while 55.5 percent still fall below the poverty cutoff postwelfare, 46.9 percent have moved above the .75 level, and 23.9 have moved out of poverty.

Welfare payments are only one source of cash income support benefits available to women who head households. There are also social insurance benefits, in particular, Social Security payments for the disabled, widows with children, and the aged. Table 3 presents the percentages receiving each of these benefit types and the average amounts received. Table 4 shows the impact these transfers have on poverty.

While it can be seen from Table 3 that the largest average benefit amounts are received by households with children who receive welfare, it must be remembered that the family size of this household type is greater than the other household types.

Table 4 indicates that, prior to any government income support transfers, aged households have the highest poverty rates, but posttransfer, households with children have the highest rates. Thus, while transfers improve the economic status of all households headed by women, they have the greatest impact on the elderly.

Policy Implications

The feminization of poverty has brought the issue of poverty face to face with the problems women experience in improving their economic status. When all household types are taken into account, almost three fourths of female heads with children are employed, yet about one quarter of them remain poor. Such figures reinforce the conclusion that these women are willing and do work, but, for many, employment is not the route out of poverty, as so many have contended. In addition, the highest poverty rates are for households with young children. Thus, even if employment is a viable option, quality day care is often not available. A 1981 study done by the U.S. Commission on Civil Rights reviewed data on the relationship between child care and equal opportunity for women. They concluded that lack of child care or inadequate child care: (1) prevents women from taking paid jobs; (2) keeps women in part-time jobs, most often with low pay and little career mobility;

and (3) keeps women in jobs for which they are overqualified and prevents them from seeking or taking job promotions.³

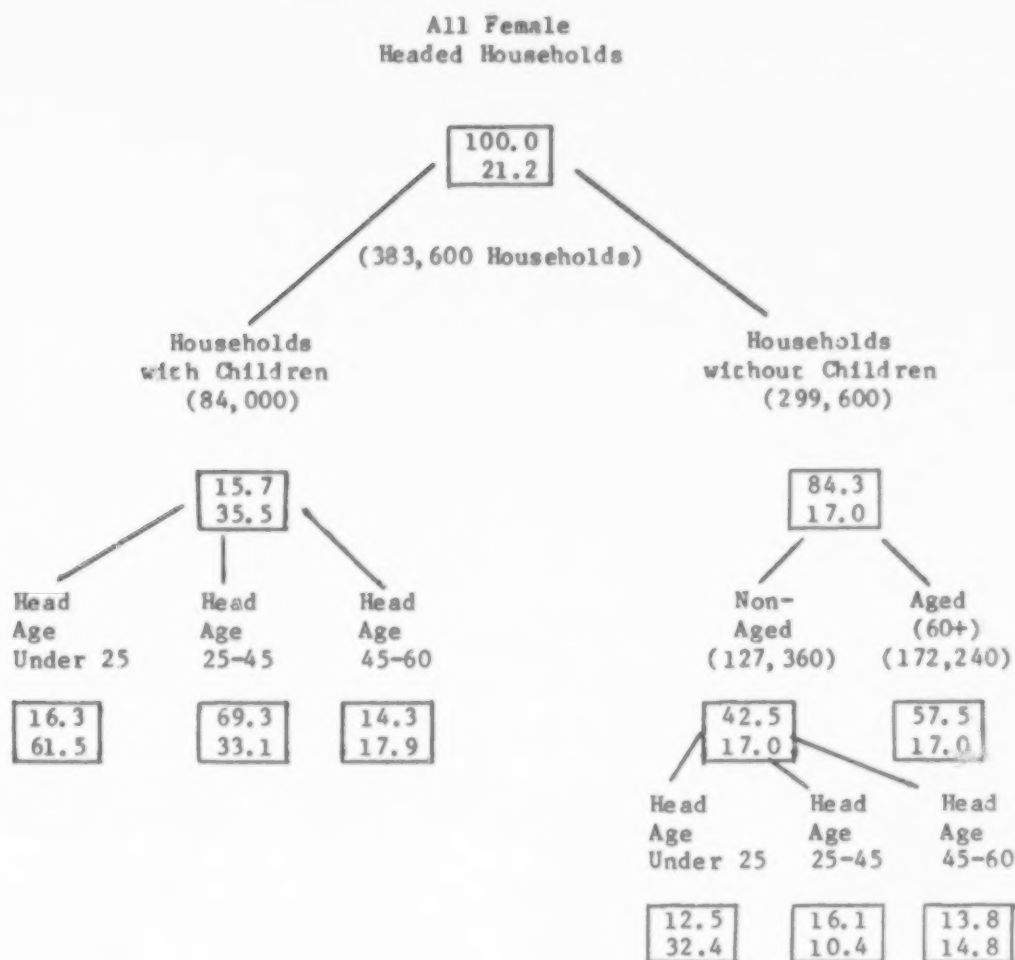
Another important factor contributing to poverty among female-headed families is lack of child support. For almost every single mother there is a father that should be contributing to the support of his children. Preliminary data on child support awards for Wisconsin indicate that, for AFDC families, only 48 percent were awarded child support and, of those, only 19 percent received the full amount awarded them, while 32 percent received nothing at all. For non-AFDC families these numbers are somewhat better - 62 percent were awarded child support and, of those, 55 percent received the full amount, and 19 percent received nothing.

The Wisconsin Department of Health and Social Services is currently working on reforming the child support system in ways that will not only reduce welfare costs, but will improve the economic well-being of female-headed families. It is clear that this is only one mechanism for attacking the problem of women in poverty. Probably the greatest challenge to policy makers is to find ways of improving the current market work opportunities and rewards, so that women can gain economic self-sufficiency.

FOOTNOTES

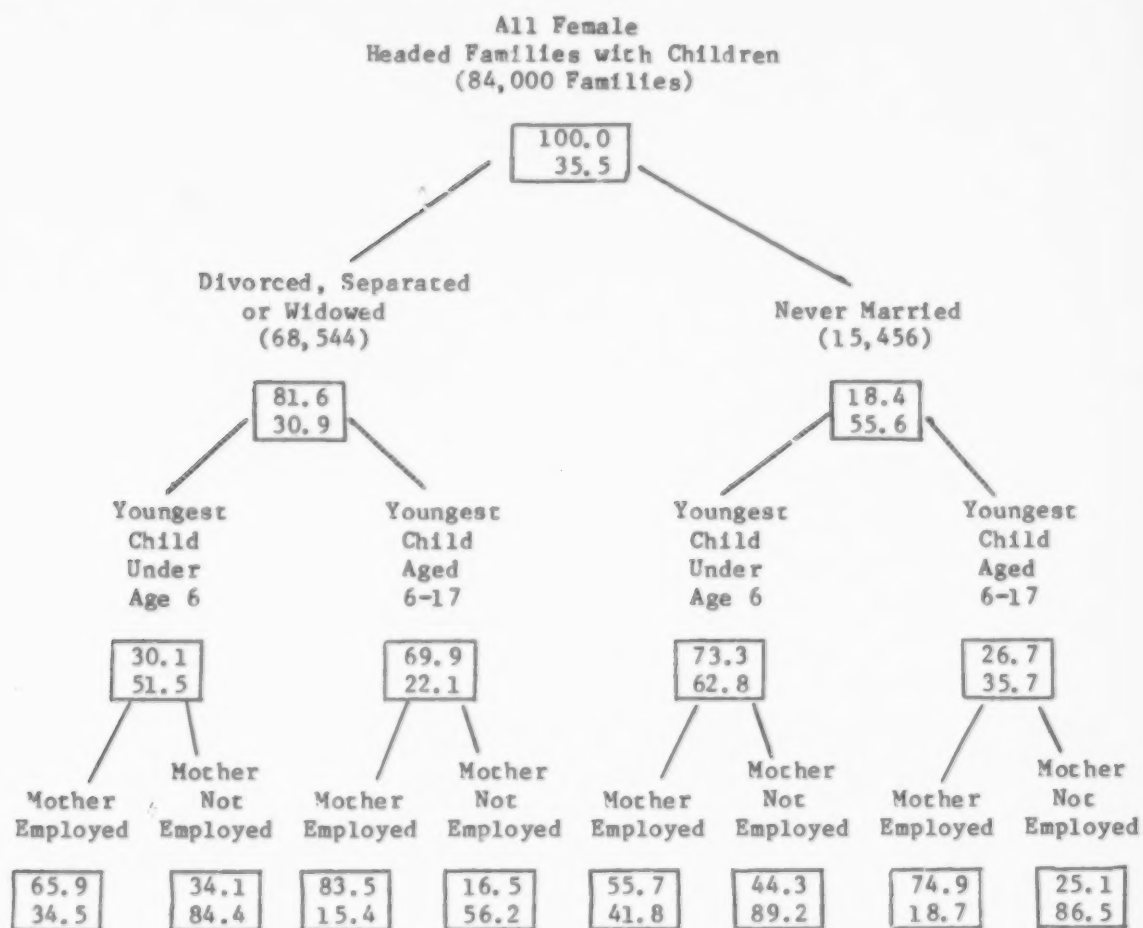
1. Diana Pearce, "The Feminization of Poverty: Women, Work and Welfare," Urban and Social Change Review, February 1978.
2. This figure is for female-headed families (i.e., households which include at least 2 related individuals). Of all female-headed households the rate was 21.2 percent (see Figure 1).
3. "Child Care and Equal Opportunity for Women," U.S. Commission on Civil Rights, June 1981.

Figure 1: The Distribution of Female Headed Households Across Household Types and the Incidence of Poverty, Wisconsin 1980 Census



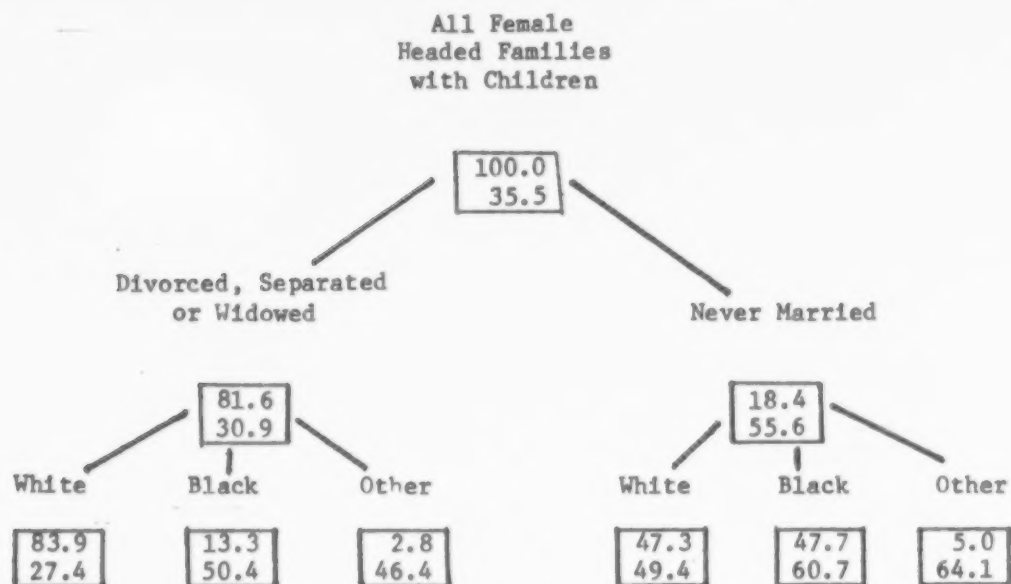
Note: The top number in the box is the percentage of the referent household type. The bottom number is the incidence of poverty for that household type. The number in parentheses is the number of households.

Figure 2: The Distribution of Female Headed Families with Children Across Family Types and the Incidence of Poverty, Wisconsin 1980 Census



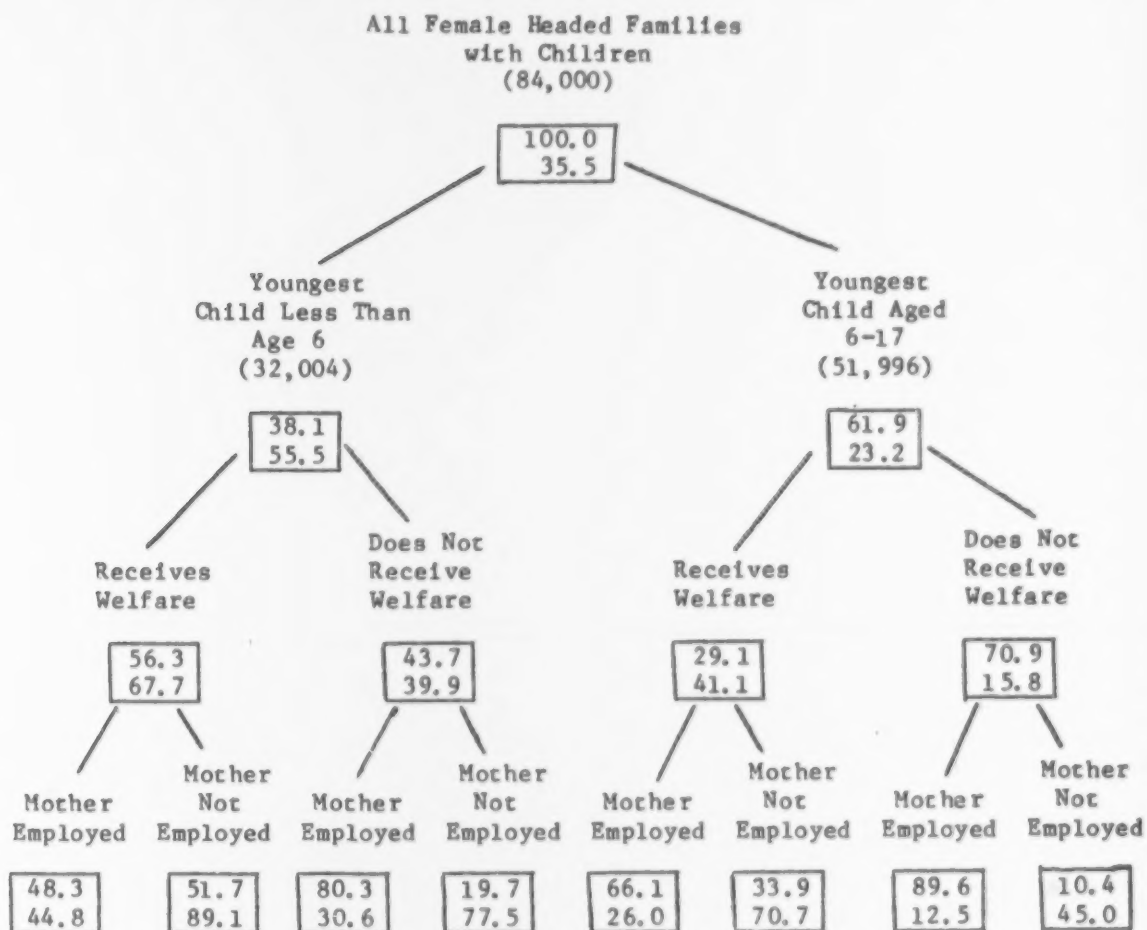
Note: The top number in each box is the percentage of the referent family type. The bottom number is the incidence of poverty for that family type. The number in parentheses is the number of families.

Figure 3. The Distribution of Female Headed Families with Children Across Family Types and the Incidence of Poverty, Wisconsin 1980 Census



Note: The top number in the box is the percentage of the referent family type. The bottom number is the incidence of poverty for that family type.

Figure 4: The Distribution of Female Headed Families with Children Across Family Types and the Incidence of Poverty, Wisconsin 1980 Census



Note: The top number in each box is the percentage of the referent family type. The bottom number is the incidence of poverty for that family type. The number in parentheses is the number of families.

Table 1: Female-Headed Families with Children Across Counties,
Wisconsin 1980 Census

Countries Ranked by Incidence of Poverty	Number of Female-Headed Families With Children	Percent of all Families in County	Incidence of Poverty for Female- Headed Families With Children
Clark	310	6.9%	58.1%
Langlade	264	9.8	58.0
Iron	98	12.1	54.1
Rusk	219	10.3	53.0
Burnett	149	9.6	53.0
Price	141	6.7	52.5
Sawyer	214	13.1	50.9
Florence	55	9.5	50.9
Forest	122	10.1	50.0
Ashland	304	13.6	49.7
Marquette	127	8.5	48.8
Menominee	105	23.2	46.7
Jackson	196	8.5	45.9
Crawford	195	8.5	44.1
Milwaukee	30001	24.3	44.0
Vilas	203	10.3	43.3
Juneau	285	10.1	42.5
Douglas	1024	17.1	42.1
Chippewa	682	8.9	41.9
Washburn	228	12.6	41.7
Barron	501	9.2	41.5
Racine	3801	15.0	40.3
Bayfield	189	10.4	40.2
Lafayette	154	6.3	39.6
Richland	192	8.3	39.6
Iowa	205	7.4	39.5
Waupaca	458	7.9	39.3
Shawano	398	8.2	39.2
Adams	185	11.0	38.9

continued

Table 1 (continued): Female-Headed Families with Children Across Counties, Wisconsin 1980 Census

Counties Ranked by Incidence of Poverty	Number of Female-Headed Families With Children	Percent of all Families in County	Incidence of Poverty for Female- Headed Families With Children
Rock	2514	12.2%	38.8%
Trempealeau	303	8.6	38.6
Waushara	215	9.0	38.6
Oconto	304	7.6	38.5
Marinette	551	10.0	38.3
Wood	1130	10.5	37.8
Dunn	378	8.9	37.6
Oneida	497	11.8	37.2
Polk	413	9.1	37.0
Vernon	243	7.1	37.0
Eau Claire	1339	13.4	36.1
Grant	493	7.2	35.9
Columbia	535	9.0	34.8
Buffalo	185	9.2	34.6
Outagamie	1820	9.5	34.3
Brown	3213	12.3	34.2
Portage	620	8.2	33.9
Fond du Lac	1078	8.7	33.7
Marathon	1550	9.4	33.4
Winnebago	2184	12.1	33.1
La Crosse	1479	12.7	32.9
Walworth	1100	11.6	32.6
St. Croix	483	7.3	31.9
Kenosha	2692	15.4	31.8
Door	271	8.1	31.7
Sauk	622	10.3	31.7
Monroe	430	8.8	30.9
Lincoln	286	7.9	29.7
Washington	987	7.3	28.5
Pierce	328	7.8	27.7

continued

Table 1 (continued): Female-Headed Families with Children Across
Counties, Wisconsin 1980 Census

Counties Ranked by Incidence of Poverty	Number of Female-Headed Families With Children	Percent of all Families in County	Incidence of Poverty for Female- Headed Families With Children
Jefferson	852	9.3%	27.2%
Dodge	784	7.5	26.8
Pepin	67	6.4	25.4
Calumet	279	6.0	25.1
Dane	5911	14.4	25.0
Manitowoc	1047	9.1	25.0
Sheboygan	1227	8.6	24.4
Green	418	9.8	24.4
Taylor	132	4.9	22.7
Waukesha	3301	7.6	22.1
Kewaunee	184	6.6	19.6
Ozaukee	789	7.7	16.5
Green Lake	188	7.9	14.9

Table 2: Poverty Status of Female Headed Families with Children Who Receive Welfare Transfers, Pre- and Post-cash Welfare

Poverty Level	Prewelfare Percent	Postwelfare Percent
Below .75	71.9%	25.0%
.75-.99	7.5	30.5
1.00-1.24	6.0	12.3
1.25-1.49	5.4	9.1
1.50-1.74	3.7	7.9
1.75-1.99	2.3	4.9
2.00+	<u>3.3</u>	<u>10.3</u>
TOTAL	100.0%	100.0%

Table 3: Cash Income Support Benefits to Female-Headed Households --
Percentage Receiving and Average Amount Received, Wisconsin
1980 Census

Household Type	Receive Welfare		Receive Social Security	
	Percent Receiving	Average Amount Received	Percent Receiving	Average Amount Received
Households with Children	39.5%	\$3448	8.9%	\$3129
Non-Aged Households Without Children	3.8	\$2047	5.2	\$2664
Aged Households	11.4	\$1772	85.3	\$3333

Table 4: Percentage of Female-Headed Households in Poverty Pre- and Post-Cash Income Support Transfers

	Pretransfer Percent Poor	Prewelfare Percent Poor	Posttransfer Percent Poor
Households with Children	48.9%	46.8%	35.5%
Non-Aged Households Without Children	20.2	18.4	16.9
Aged Households	66.0	26.0	19.8

POVERTY AMONG WISCONSIN'S ELDERLY

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Introduction

The 1970s witnessed a significant decline in the proportion of elderly with incomes below the officially designated poverty line. This decline occurred nationally, in the State of Wisconsin, and within geographic subareas of Wisconsin. Increases in Social Security benefits and pensions were among the major reasons for proportionate declines in poverty among the elderly. Despite these reductions, a relatively large number of older persons had incomes only slightly above the poverty cut-off dollar amount, a group that is often termed the "near poor." In addition, certain subgroups, such as those living alone, women, minorities, and the extreme elderly, had a disproportionate number in poverty.

This presentation gives a demographic overview of poverty among Wisconsin's elderly population based on data available from the 1980 Census.¹ Topics include: (1) Correlates of Poverty, including (a) Age, sex, and race (b) Living arrangements and family composition (2) The Near Poor, and (3) Income and Social Security.

Background

Since the beginning of the twentieth century, Wisconsin's population aged 65 and over (65+), the so-called elderly, has

increased both numerically and proportionately, that is, the elderly population has come to represent a larger proportion of the state's total population (see Figure 1). From 1900 to 1980, the number of older Wisconsinites grew from 120,000 to 560,000. As a proportion of the State's population, the elderly increased from five to twelve percent. By the year 2000, it is estimated that the elderly will comprise 13.2 percent of the State's total population, an increase of 1.2 percent from 1980. Both the steady decline in age specific mortality rates and the decline in fertility rates since about 1960 have contributed to the growing proportion of the elderly.

Figure 2 illustrates the decline from 1969 to 1979 in the proportion of persons of all ages and those 65+ with incomes below poverty for the United States and Wisconsin. In both years, Wisconsin had a smaller proportion of its total and elderly population in poverty than the U.S. as a whole. In Wisconsin, the proportion of people 65+ with incomes below poverty declined from 25 percent to just under ten percent. For the U.S. as a whole, 27 percent of the elderly were in poverty in 1969 in comparison to 15 percent in 1979.

In 1969, a disproportionately large number of the elderly were in poverty relative to persons in poverty of all ages in both the U.S. as a whole and in Wisconsin. However, declines in poverty rates over the period 1969 to 1979 proceeded more rapidly among the elderly than among persons of all ages. As a result, the gap between the elderly and the total group narrowed considerably. By 1979, little difference existed in the proportion of persons in

poverty between the elderly and the total population in Wisconsin.

The prevalence of poverty is not uniformly distributed across Wisconsin. Figure 3 delineates counties according to the proportion of persons 65 years and over who had incomes below poverty. Table 1 shows the number of elderly in each county and the percent living in poverty. The majority of Wisconsin counties had elderly poverty rates above the State average of 9.5 percent. Counties with the highest poverty rates were predominately nonmetropolitan, with a high concentration of elderly persons relative to the State average. In contrast, metropolitan areas, where populations tend to be younger, generally reported the lowest prevalence of poverty among the elderly. In Milwaukee County, Wisconsin's most populated county, elderly poverty was disproportionately concentrated in the central city.

Correlates of Poverty

Age, sex, and race

Three demographic factors - age, sex, and race - identify groups with above average poverty rates among the elderly. Poverty rates within the elderly population increase with increasing age. In 1980, the proportions of Wisconsin elderly in poverty for the age groups 65 to 74, 75 to 84, and 85+ were, respectively, 7.0, 12.4, and 17.1 percent. Elderly women were more likely to be poor than were elderly men (11.4 versus 6.5 percent). Elderly blacks had higher rates of poverty than did elderly whites (22.4 versus 9.4 percent).

Women are disproportionately represented among the elderly, especially at the higher end of the age continuum, due to their longer life expectancy. Figure 4 compares the number of men and women aged 65+ for the year 1980 and shows projections for the year 2000. In 1980, women comprised about 58 percent of the elderly population. According to projections of Wisconsin's population into the next century, the number of elderly women is expected to increase more rapidly than the number of men. By the year 2000, the elderly population is expected to be 60 percent female.

Living arrangements and family composition

Figure 5 shows three categories of living arrangements among Wisconsin's older population: elderly who live in families, alone, and in group quarters. About sixty percent of all elderly lived in families in 1980. The likelihood of living with other family members declined with age. The figure also shows that women were less likely to live in families than were men at all age intervals.

Elderly in Families. Families often represent sources of both social and economic support to their members. Figure 6 compares the poverty rates of elderly persons who lived in families with those who lived alone, by sex and age. It can be seen that poverty rates were significantly higher among the elderly who lived alone than for those who lived in families, for both men and women and for all age groups. Among those living in families, only for those ages 85 and over was the proportion of women living in poverty lower than for men. Among those living alone, in each age interval, elderly women were much more likely to be poor than were elderly men. This gap

was especially prominent for those aged 75 and over.

Despite similar rates of poverty among older men and women in families, overall poverty rates among women remained higher than for men because women were much less likely to live in families than were men. Several demographic processes contribute to this phenomenon. Women not only live longer than men, but they also tend to marry men older than themselves. Further, women are more likely than men to experience the death of a spouse, and elderly widowers are more likely to remarry than are widows.

A close association exists between living with a spouse and economic well being. Thirty-eight percent of all elderly women in Wisconsin lived with their spouses in 1979, but among those in poverty, only 17 percent lived with their spouses (see Table 2). A similar comparison for elderly men is almost as dramatic. Seventy-two percent of all men 65+ lived with their spouses, but only 56 percent of men in poverty lived with spouses. Similarly, the proportions of elderly widows and widowers was higher among those in poverty than among the total elderly population.

Some elderly without spouses (including the divorced, separated, and never married, as well as widows and widowers) may be able and prefer to live with other family members, for example a sibling, child, or parent. Such living arrangements were found less frequently among elderly men and women in poverty than for the group as a whole.

Elderly Not Living in Families. The elderly not living in families may be living with nonrelatives, alone, or in group

quarters. Although the proportion living with nonrelatives is somewhat greater among the elderly poor than all elderly, very few were found in this living arrangement. A large proportion of elderly women lived alone in 1980 (38 percent), especially among poor elderly women (69 percent). At ages 65 to 74, one third of all women lived alone. In contrast, only 14 percent of Wisconsin men aged 65+ lived alone; twice as many (33 percent) elderly men in poverty lived alone. For men and women, the probability of living alone was greater at ages 75 to 84 than at ages 65 to 74, however, by ages 85+, relatively large numbers were in group quarters. Although most older Wisconsinites lived independently in a community setting, about ten percent of those 65+ were in group quarters.²

Minority Aged. Racial and ethnic minorities comprise only a small proportion of Wisconsin's population. Relative to the total population, the proportion of persons 65+ among racial and ethnic minorities is low due to their higher age specific mortality rates and higher fertility. The 1980 Census indicated that the following proportions of each group were 65 and over: white, 12.5 percent; black, 3.8 percent; American Indian, 5.0 percent; and Spanish origin, 3.6 percent. The proportion of elderly in poverty is greater among minority populations than among whites. In 1980, the proportion of persons 65 years and over in poverty for whites, blacks, Indians, and persons of Spanish origin were, respectively: 9.0, 22.4, 17.8, and 10.2 percent.

Figure 7 compares the percent of persons 65+ in poverty for blacks and whites by living arrangements and sex. In each

comparison, the prevalence of poverty is substantially greater among blacks than whites. Among blacks and whites a larger proportion of women than men were in poverty, however, the male-female gap in poverty rates is somewhat narrower among blacks than among whites. As with whites, blacks living in families are less likely to be poor than those living alone, however, living in a family does not appear to act as a buffer against poverty among blacks to the extent which it does for whites. Among those in families, approximately four times more blacks had 1979 incomes below poverty than did whites.

The Near Poor

The 1979 dollar cutoff amount for poverty was \$3479 for persons 65+ living alone and for unrelated individuals. The amount for two person families with a householder 65+ was \$4389. The respective incomes at 125 percent of poverty were \$4348 and \$5487. Persons with incomes between 100 and 125 percent of the poverty line are referred to as the "near poor." Comparisons between the near poor and the poverty population can be considered in two ways. On the one hand, one can look at the differences between the near poor and the poor which have enabled the former group to acquire incomes just above the poverty line. On the other hand, one can look at the near poor as a group with sufficiently low levels of economic resources to warrant concerns similar to those directed toward people with incomes below 100 percent of poverty.

Figure 8 compares the proportion of Wisconsin's elderly population in poverty by two classifications: (1) those with

incomes below the poverty line, and (2) those with incomes between 100 and 125 percent of poverty. In each of the geographic categories shown in Figure 8, the additional 25 percent doubled the proportion of people in poverty. Like those below 100 percent of poverty, a larger proportion of Wisconsin's near poor elderly lived in nonmetropolitan than metropolitan areas of the state. About 25 percent of the nonmetropolitan elderly were either poor or near poor in 1979. For metropolitan counties, the proportion was 16 percent. In Milwaukee County, the proportion of elderly with incomes below 125 percent of poverty was nearly two times greater in the central city than in the remainder of the county.

Figure 9 graphically illustrates the relationship between living arrangement and the various poverty levels for Wisconsin's elderly population by sex. Among elderly family heads, about ten percent were either poor or near poor (100 to 124% of poverty level). Almost 35 percent of elderly Wisconsin men who lived alone had 1979 incomes below 125 percent of poverty. Among elderly Wisconsin women living alone, about 42 percent were either in poverty or near poor.

In terms of many correlates of poverty among the elderly, the near poor represent a point in between the poverty population and the population as a whole. For example, low levels of education, extreme agedness, and being nonwhite were more characteristic of the elderly poor than all persons 65+. The greatest difference between the poor and the near poor was the proportion who received Social Security payments. In 1979, the proportion of the elderly receiving Social Security benefits was 75 percent among those in poverty;

among the near poor, it was 95 percent. The receipt of Social Security may have lifted the poor into the near poor category. The next section will examine more closely the relationship of income and Social Security benefits to poverty.

Income and Social Security

While less than ten percent of Wisconsin's elderly were included among the 1979 poverty population, the elderly were still not as well off economically as the population for the State as a whole. Figure 10 shows the income distribution for all households and those with a householder 65+. In 1979, more than half of all elderly householders had incomes of \$10,000 or less. In contrast, the median household income for householders of all ages was \$17,700 (Figure 11). Just over one fourth of these households had incomes of \$10,000 or less (Figure 10). The larger proportion of elderly householders with low incomes is partly due to differences in household composition. Among the elderly, a relatively large proportion of households consisted of one person, often female, who was not working. Nonelderly households were more likely to have multiple earners contributing to household income.

In contrast to household income distributions, there is greater similarity in personal income distribution between unrelated individuals (those living alone or without relatives) of all ages and elderly unrelated individuals, as shown in Figure 12. Still, among unrelated individuals aged 65+, the median income of \$4,500 was about \$2,000 less than for unrelated individuals of all ages (Figure 11).

Improvements in Social Security benefits constitute one of the major reasons for the decline in poverty among the elderly. In 1979, 85 percent of all persons 65+ in Wisconsin received at least some Social Security income (see Table 3). Little difference existed in the overall proportion of elderly men and women who received Social Security, however, among those living with a spouse, women were less likely to have Social Security than men. A larger proportion of men and women who lived alone received Social Security than did those in families.

Figure 13 demonstrates the importance of Social Security payments as average proportions of total 1979 income among the elderly who were family heads or lived alone.³ Social Security comprised at least half of total income regardless of sex and living arrangements, however, it constituted a somewhat smaller proportion of income for family heads than for those who lived alone. Probably because family heads tend to be on the younger side and more likely to be in the labor force than the elderly who lived alone, wages, dividends, and interest comprised the second most important source of income among the family heads. Among the elderly who lived alone, "other" income sources, which included private pensions, ranked second.

Social Security payments took on even greater importance for the elderly poor as compared with all persons 65+ (see Figure 14).⁴ Social Security represented about 80 percent of total income for the elderly poor who lived alone and for male family heads. Elderly female family heads below poverty received about 70 percent of their

income in the form of Social Security. The contribution to income from wages, dividends, and interest among the elderly poor varied depending upon sex and living arrangements, but, on average, at least ten percent of the elderly poor's income came from such sources, with the exception of men who lived alone.

Public assistance, including Supplemental Security Income (SSI), was relatively more important as a percent of total income among the elderly poor as compared to all elderly persons. However, the fact that this group of the elderly had total incomes below the official poverty line indicates that in 1979 they did not obtain the maximum SSI benefits. Comparison of Figures 13 and 14 also reveals that the elderly poor received notably small proportionate contributions to total income from "other" sources, which include mainly private retirement and pension benefits.

Figures 15 and 16 demonstrate the vital role of actual dollars from Social Security in alleviating poverty among Wisconsin's elderly aged 60+⁵. If Social Security payments are subtracted from family income among families with a householder 60+, the proportion of families in poverty increases from four to 31 percent. Among unrelated individuals aged 60+, this same calculation produces a threefold increase in the proportion with incomes below poverty, from 20 to 64 percent. In both metropolitan and nonmetropolitan areas of Wisconsin, Social Security provided the income needed to keep very large proportions of the elderly out of poverty.

Summary and Conclusions

While poverty rates among Wisconsin's elderly have declined over recent decades, significant numbers of the elderly continue to have incomes either below or just above the officially designated poverty line. Certain ascribed characteristics, such as extreme age, being female or nonwhite, related to higher than average probabilities of poverty among the elderly. The economic disadvantages that women and the extreme elderly faced were exacerbated by the fact that relatively high proportions did not live in families, which appeared to provide some buffer against poverty. This situation is due partly to the fact that wives generally outlive their husbands, and thus experience the dissolution of their family living arrangements. Differences in mortality do not, however, fully explain why such a large proportion of women and the extreme aged were poor, nor do they explain why elderly nonwhites were more likely to be poor than whites.

Social Security payments have clearly played a major role in alleviating poverty among Wisconsin's elderly. In their absence, poverty would be widespread. Although Social Security enabled many recipients to escape actual poverty, the payments were such that many of Wisconsin's elderly remain near poor. Access to economic resources at older ages is generally associated with higher economic status during younger, working ages. Thus, economic status among elderly women and nonwhites partly reflects the disadvantages that these groups faced in the labor market. Few of the elderly poor reported income from pensions, which could raise income above a

minimum level. The Supplemental Security Income Program, which includes both federal and state dollars, is designed to provide a minimum income for elderly and disabled persons with extreme financial need. For reasons not explored in this report, the SSI Program did not prevent nearly 50,000 elderly persons in Wisconsin from living in poverty in 1979.

This report has provided a skeleton overview of poverty among Wisconsin's elderly and serves as useful background for more detailed exploration of the subject. We recommend more attention be given to groups with relatively high proportions in poverty, and to geographic contrasts within the State.

FOOTNOTES

1. Families and unrelated individuals (persons living alone or unrelated to the householder) are classified as above or below the poverty level by comparing their total 1979 income to an income cutoff or "poverty threshold." For a more detailed discussion of the poverty status concept, including its limitations, see U.S. Department of Commerce, Bureau of the Census, 1980 Census of Population and Housing, Public-Use Microdata Samples Technical Documentation, pages K-33 to K-36.
2. Two general categories of living arrangements are classified as group quarters: institutions and "other." The latter consists of 9 or more persons living together and unrelated to the householder, as well as military barracks, college dormitories, and other living arrangements designated by the Census Bureau. The Census Bureau does not calculate poverty status for inmates of institutions, members of the Armed Forces living in barracks, college students living in dormitories, and unrelated individuals under 15 years old. Thus, poverty rates do not take into account most of the group quarters population. Among Wisconsin's elderly in group quarters in 1980, 94 percent were not included in the population for whom poverty status was determined. The vast majority of these were in nursing homes. Poverty statistics in this report refer to the population for whom poverty status was determined.
3. Sources of income in Figures 13 and 14 are as follows: (1) Social Security, including Railroad Retirement; (2) wages, including salaries, bonuses, tips, own farm or nonfarm income from businesses, partnerships, or professional practices, interest, dividends, royalties, or net rental income; (3) public assistance, including Supplemental Security Income (SSI), or public welfare payments; (4) other, including unemployment compensation, veterans' payments, pensions, alimony, or any other source of income received regularly. For the calculations in Figures 13 and 14 negative income from wages, interest, or dividends (category 2 above) was set to zero. Persons with a total income less than or equal to zero were excluded.
4. The percent of persons in poverty who were excluded from calculations shown in Figure 14 because their income was less than or equal to zero were: family heads: male, 17 percent, female, 6 percent; living alone: male, 7 percent, female, 5.5 percent. They represent less than 1 percent of all persons 65+.
5. The source for these data is Summary Tape File 4. Similar calculations for the population aged 65+ based on the 1980 PUMS data were not available at the time of presentation because they require special calculations based on family record data as well as individual record data.

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- Figure 1. Percent of Wisconsin's Population Age 65 and Over, 1910-2010. Sources: Bureau of Health Statistics, Department of Health and Social Services; and "Wisconsin Population Projections, 1983," Wisconsin Department of Administration, Demographic Services Center.
- Figure 2. Percent of Persons 65 and Over Below Poverty, U.S. and Wisconsin, 1969 and 1979. Sources: 1970 Census of Population and Housing, Characteristics of the Population, U.S. Summary (Table 259) and Wisconsin (Table 58). 1980 Census of Population and Housing, 3rd Count Summary Tape, File C, U.S. Summary and Wisconsin.
- Figure 3. Proportion of Elderly in Poverty, Wisconsin, 1979. Sources: 1970 Census of Population, 4th Count Summary Tape. 1980 Census of Population and Housing: Advance Estimates of Social, Economic and Housing Characteristics. 1980 Census of Population: General Population Characteristics.
- Figure 4. Wisconsin's Population 65 Years and Over by Sex, 1980 and 2000. Source: "Wisconsin Population Projections, 1983," Wisconsin Department of Administration, Demographic Services Center.
- Figure 5. Elderly Living Arrangements by Sex, Wisconsin, 1980.
- Figure 6. Percent of Persons 65 Years and Over Below Poverty, by Living Arrangements and Sex, Wisconsin, 1979.
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- Figure 10. Household Income Distribution, Wisconsin, 1979.
- Figure 11. Median Income of Families, Households, and Unrelated Individuals, Wisconsin, 1979.
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- Figure 13. Income Sources for the Elderly by Living Arrangements and Sex, Wisconsin, 1979.

Figure 14. Income Sources for the Elderly in Poverty by Living Arrangements and Sex, Wisconsin, 1979.

Figure 15. Percent of Elderly Families and Unrelated Individuals in Poverty, Including and Excluding Social Security, Wisconsin, 1979. Source: 1980 Census of Population and Housing, Summary Tape File 4, Table PB106.

(Note: Similar calculations for the population aged 65+ based on the 1980 PUMS data were not available at the time of presentation because they require special calculations based on family record data as well as individual record data.)

Figure 16. Percent of Elderly Families and Unrelated Individuals in Poverty, Including and Excluding Social Security, by Metropolitan Status, Wisconsin, 1979. Source: 1980 Census of Population and Housing, Summary Tape File 4, Table PB107 (see Note above).

*Unless otherwise noted, data for figures are from the U.S. Department of Commerce, Bureau of the Census, Census of Population and Housing 1980, Public-Use Microdata Samples (PUMS).

Figure 1: Percent of Wisconsin Population Age 65 and Over, 1910-1920

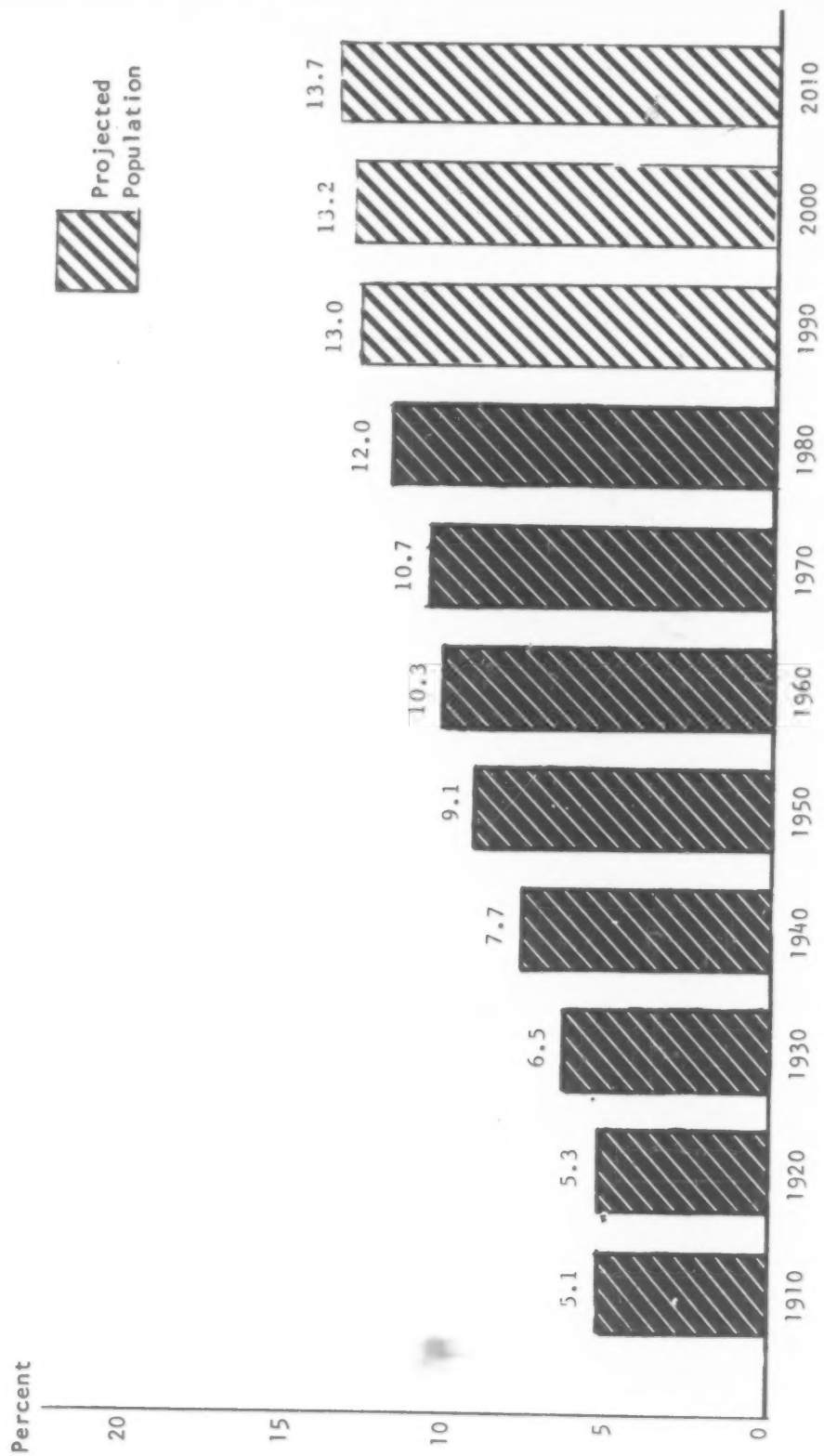
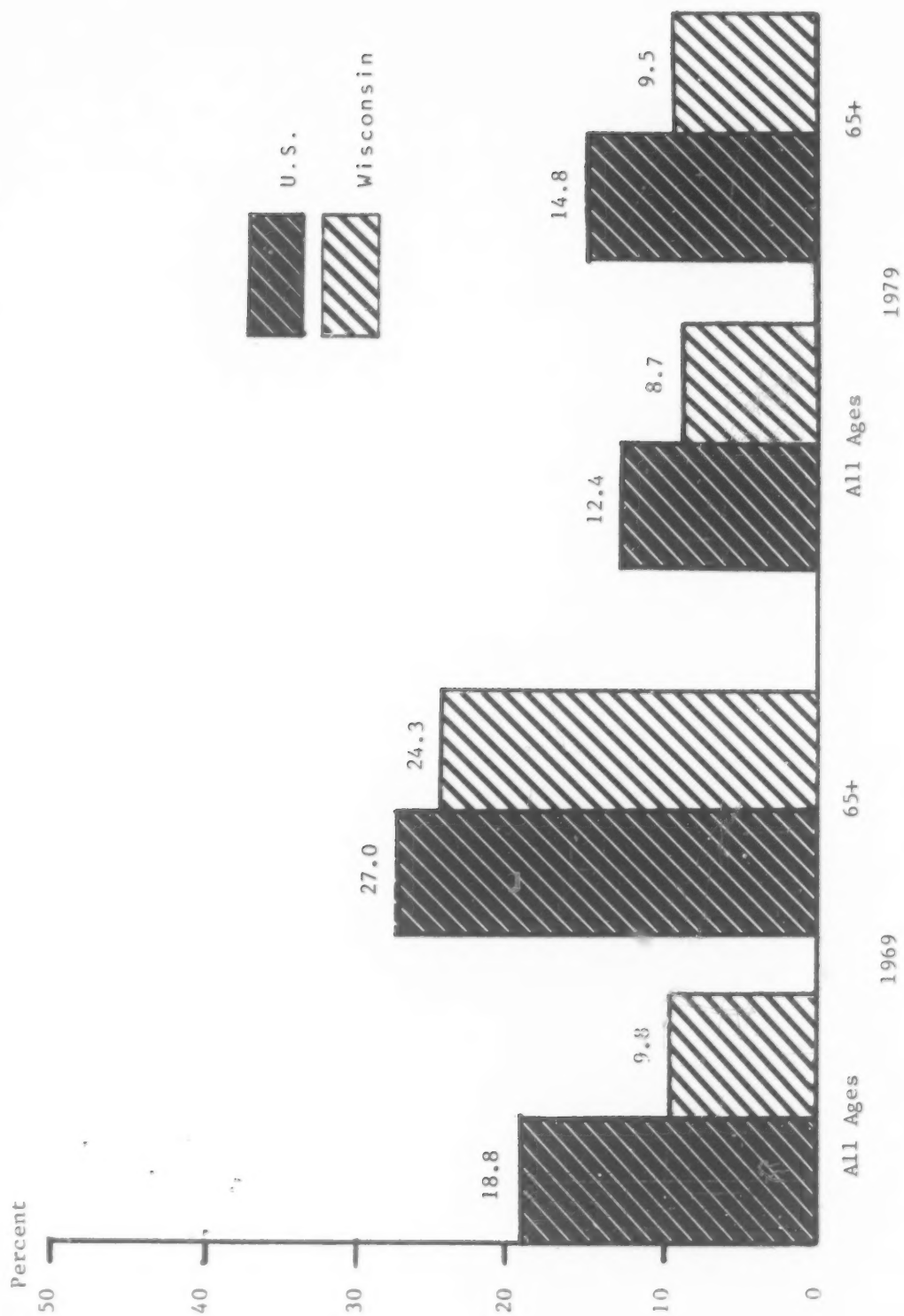


Figure 2: Percent of Persons 65 and Over Below Poverty, U.S. and Wisconsin, 1969 and 1979



Map of Wisconsin showing county-level estimates of the percentage of the population aged 15 years and over who are high school graduates. The map uses four shading patterns to represent different percentage ranges:

- 0 - 4.9
- 5 - 9.9
- 10 - 14.9
- 15 +

Figure 4: Wisconsin's Population 65 Years and Over By Sex, 1980 and 2000

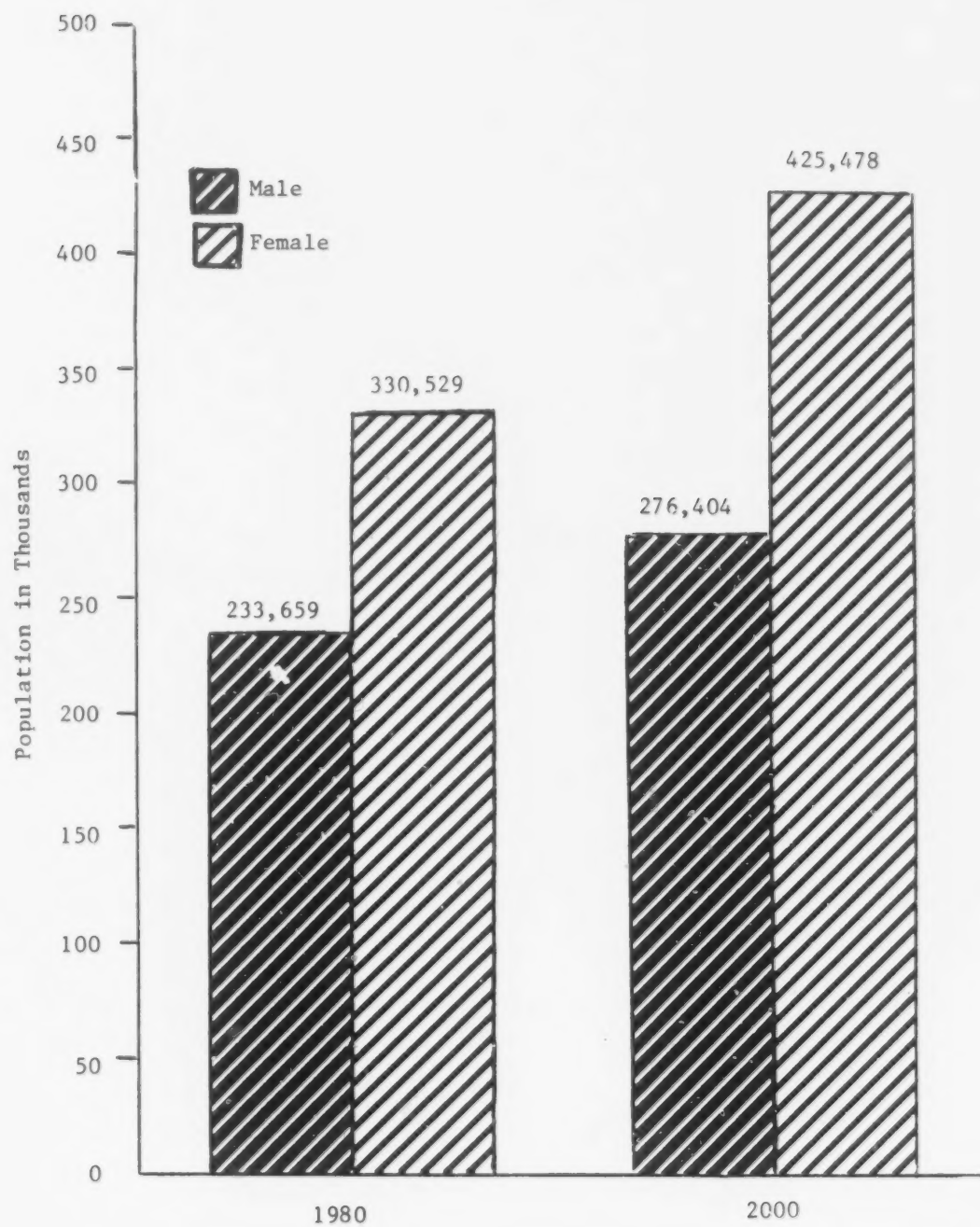


Figure 5: Elderly Living Arrangements By Sex, Wisconsin, 1980

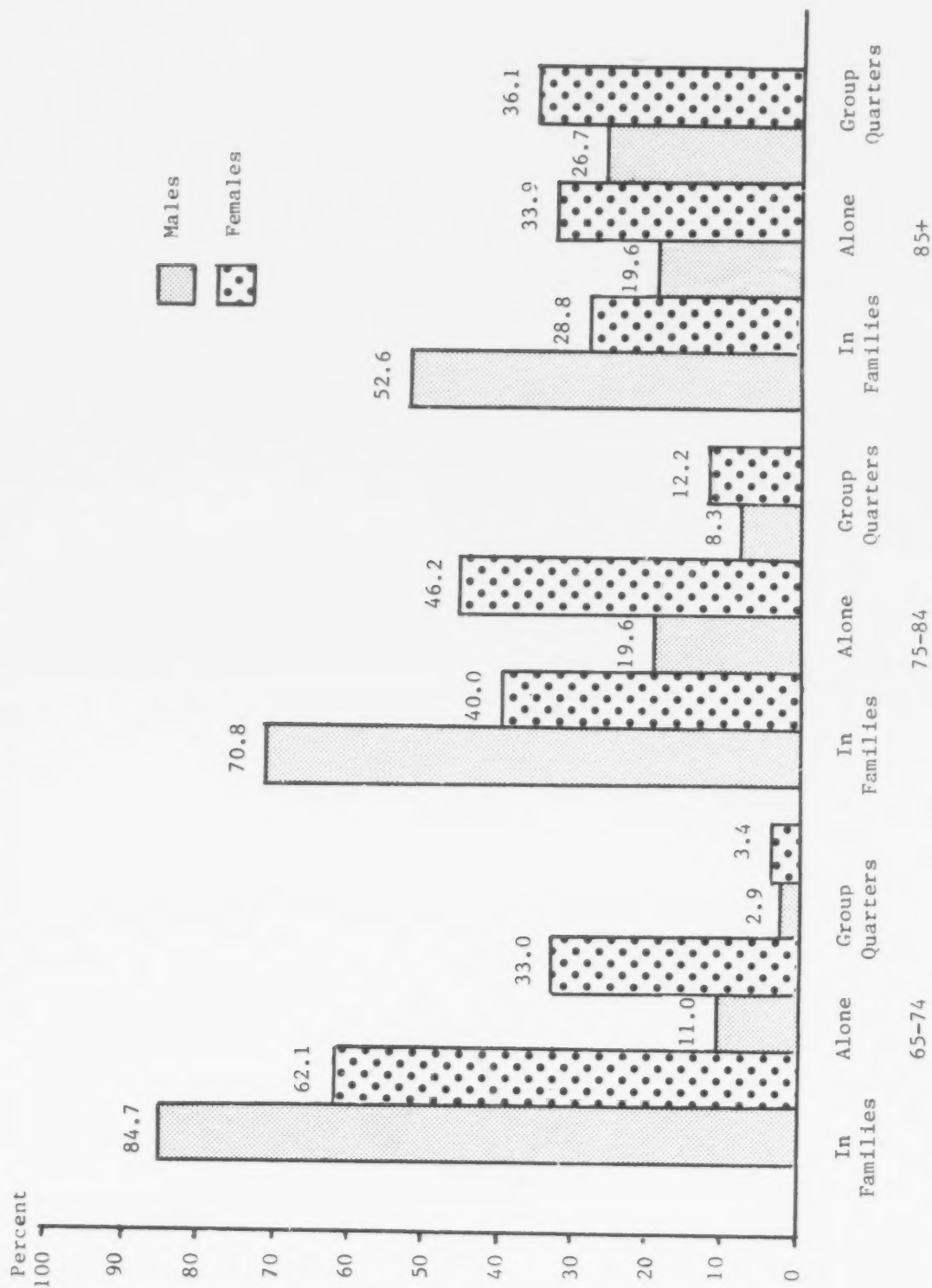


Figure 6: Percent of Persons 65 Years and Over Below Poverty, By Living Arrangements and Sex, Wisconsin, 1979

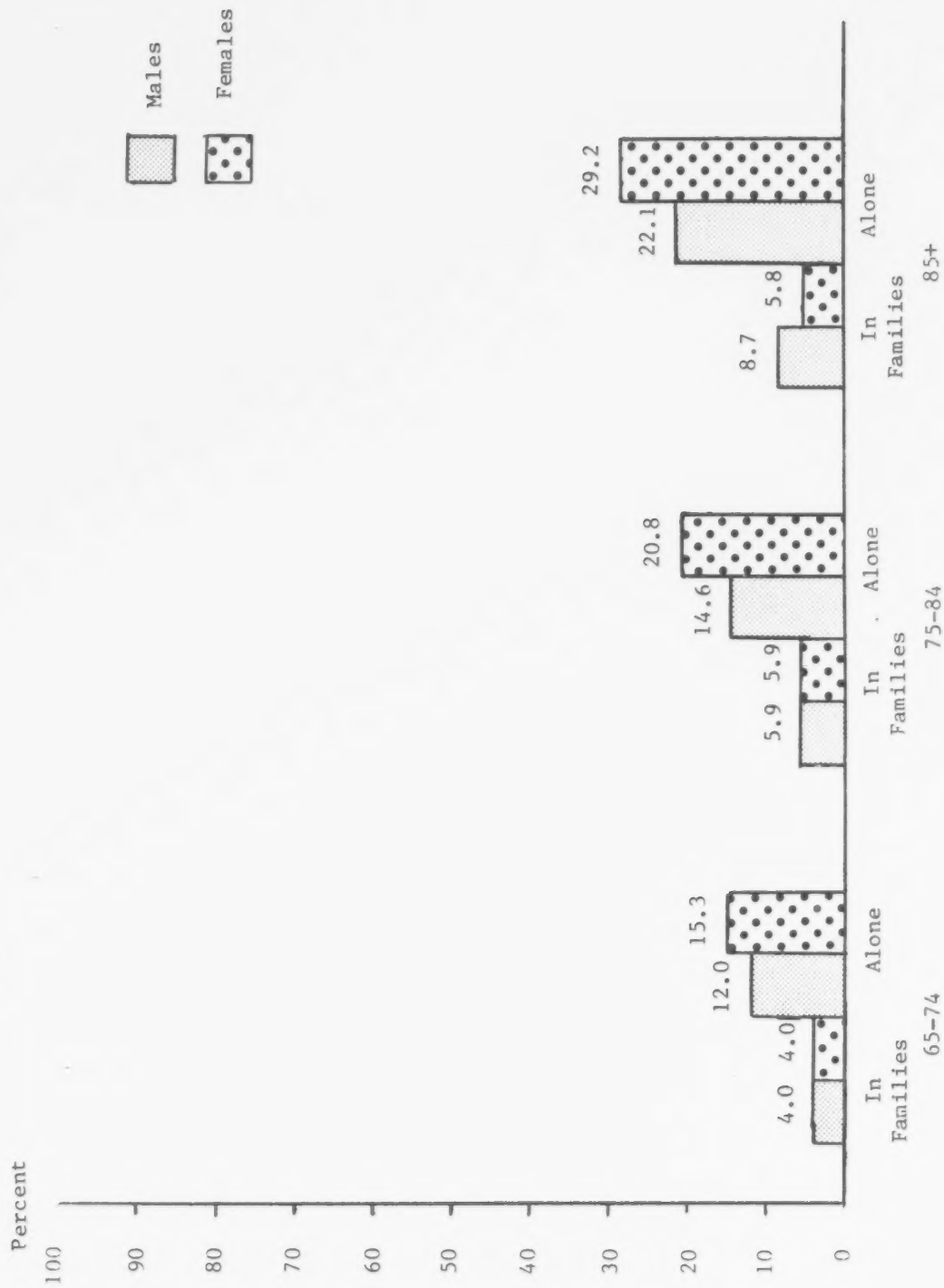


Figure 7: Percent of Persons 65 Years and Over Below Poverty By Living Arrangements, Race, and Sex, Wisconsin, 1979

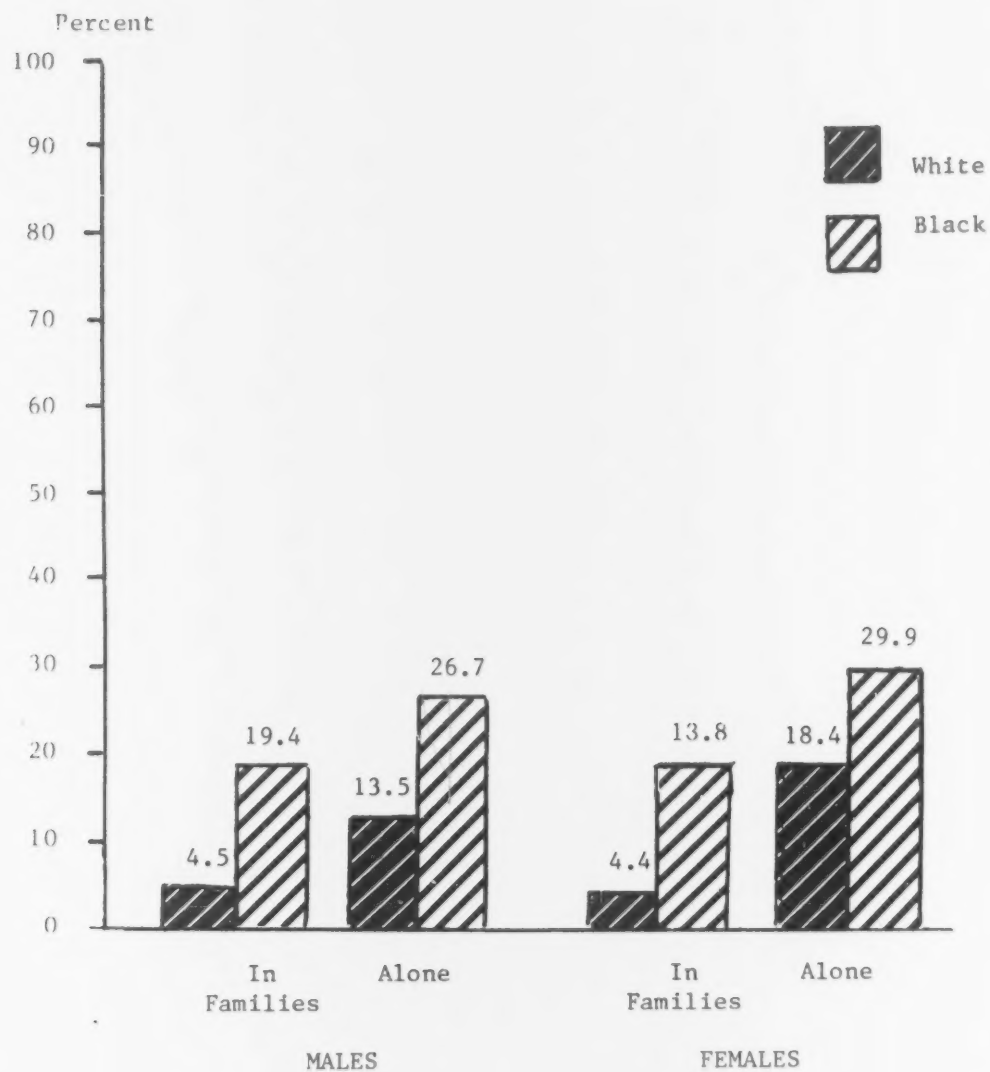


Figure 8: Poverty Status of Persons 65 Years and Over by Met/Nonmet Counties, Wisconsin, 1979

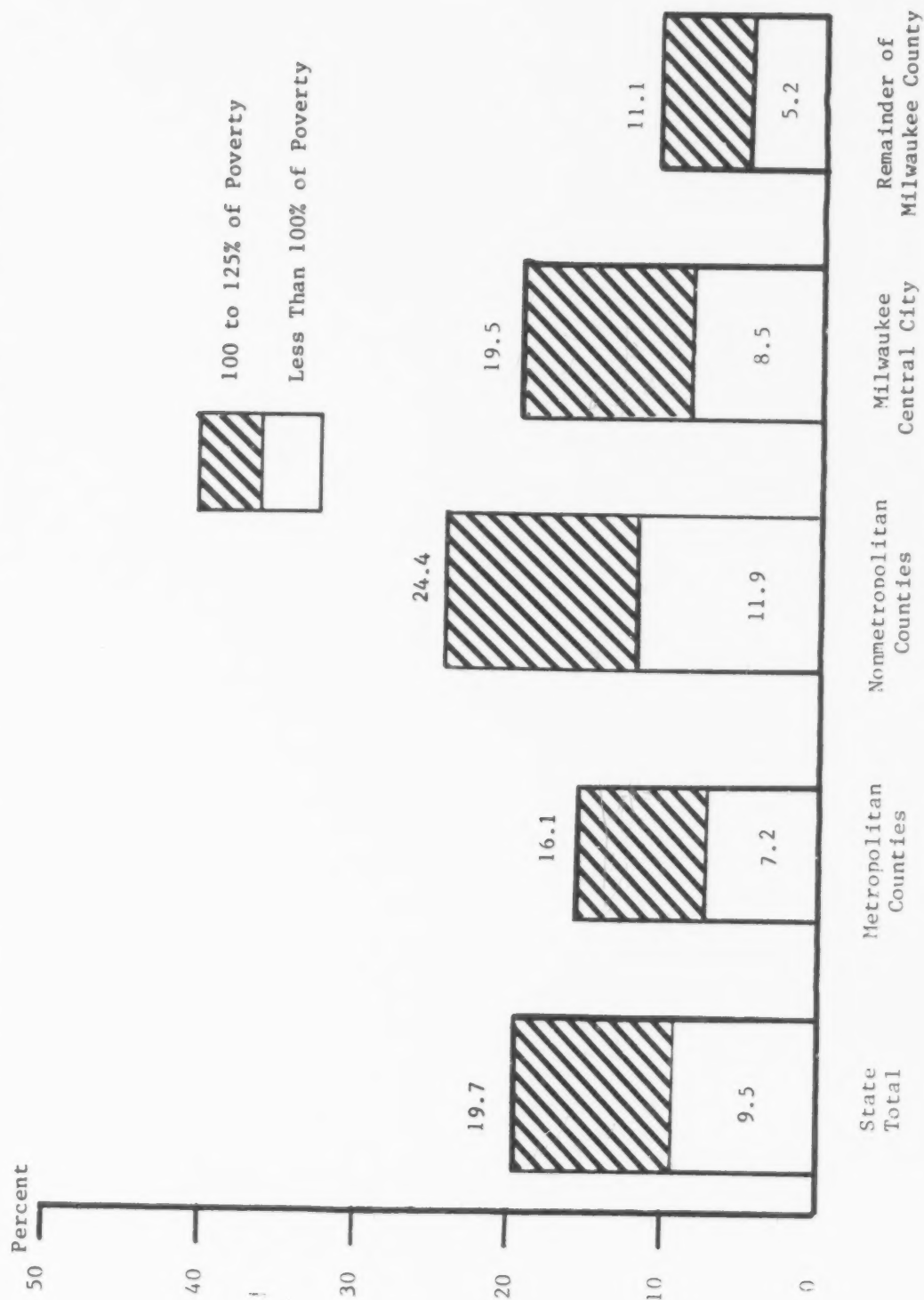
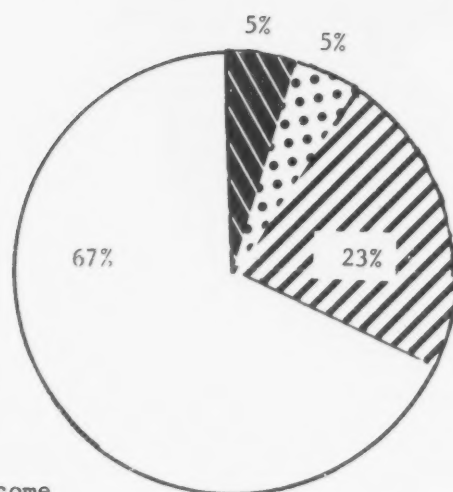
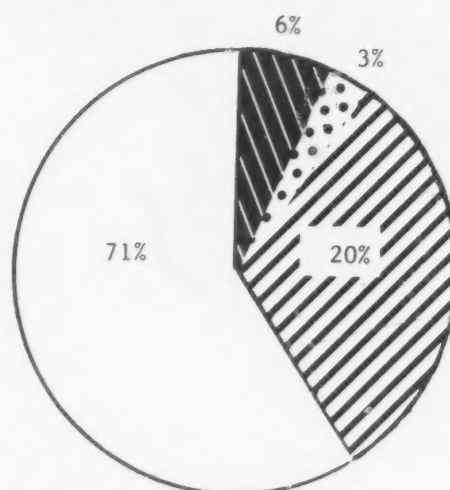


Figure 9: Poverty Status of the Elderly by Living Arrangements and Sex, Wisconsin, 1979

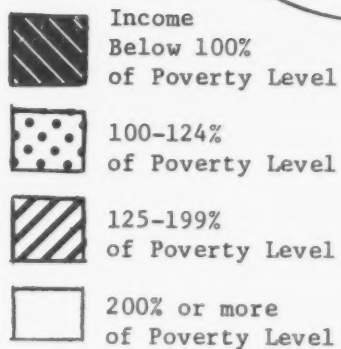
Family Heads



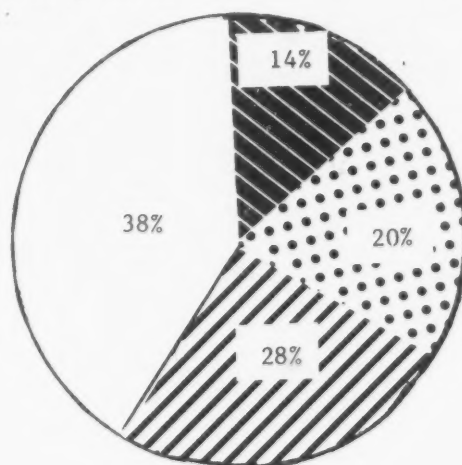
Male



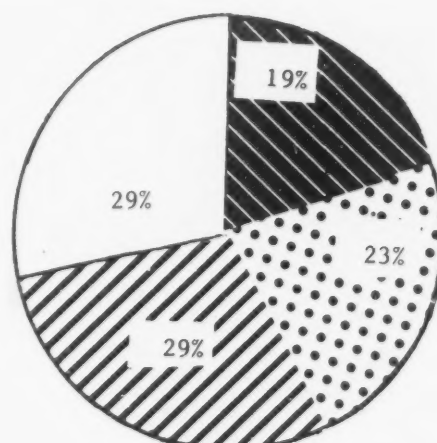
Female



Living Alone



Male



Female

Figure 10: Household Income Distribution, Wisconsin, 1979



Figure 11: Median Income of Families, Households, and Unrelated Individuals, Wisconsin, 1979

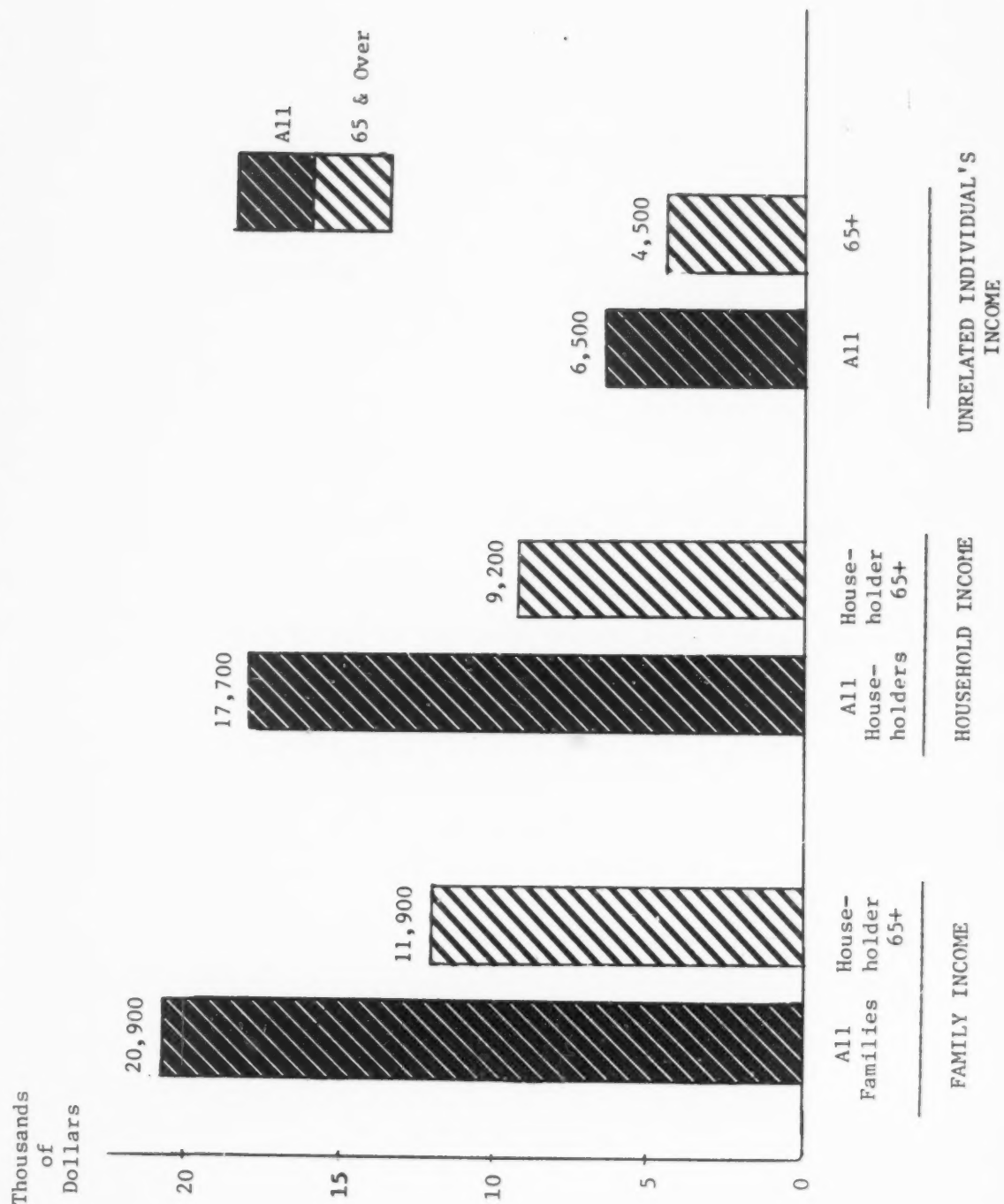


Figure 12: Personal Income Distribution of Unrelated Individuals,
Wisconsin, 1979

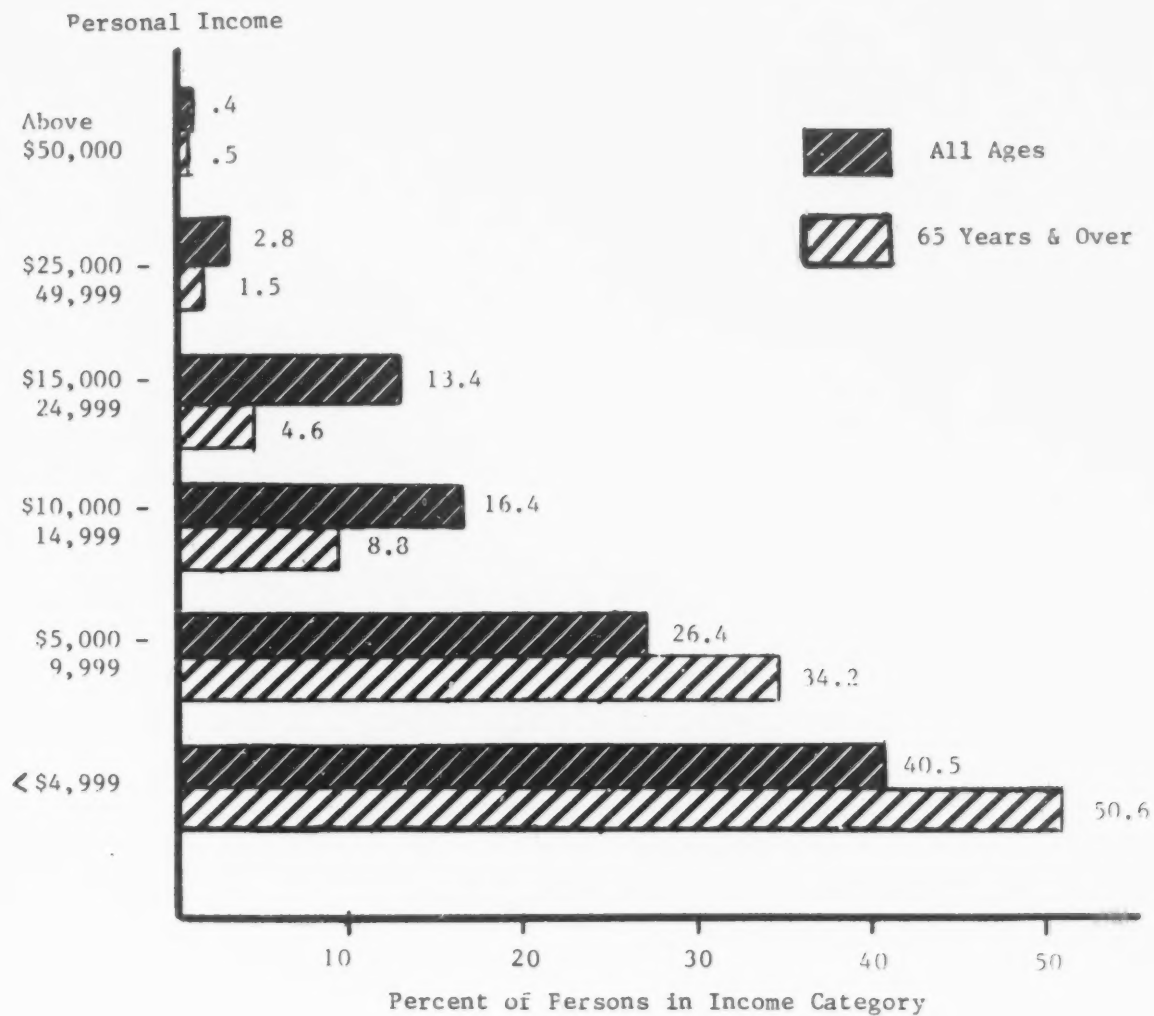


Figure 13: Income Sources for the Elderly by Living Arrangements and Sex, Wisconsin, 1979



Figure 14: Income Sources for the Elderly in Poverty by Living Arrangements and Sex, Wisconsin, 1979

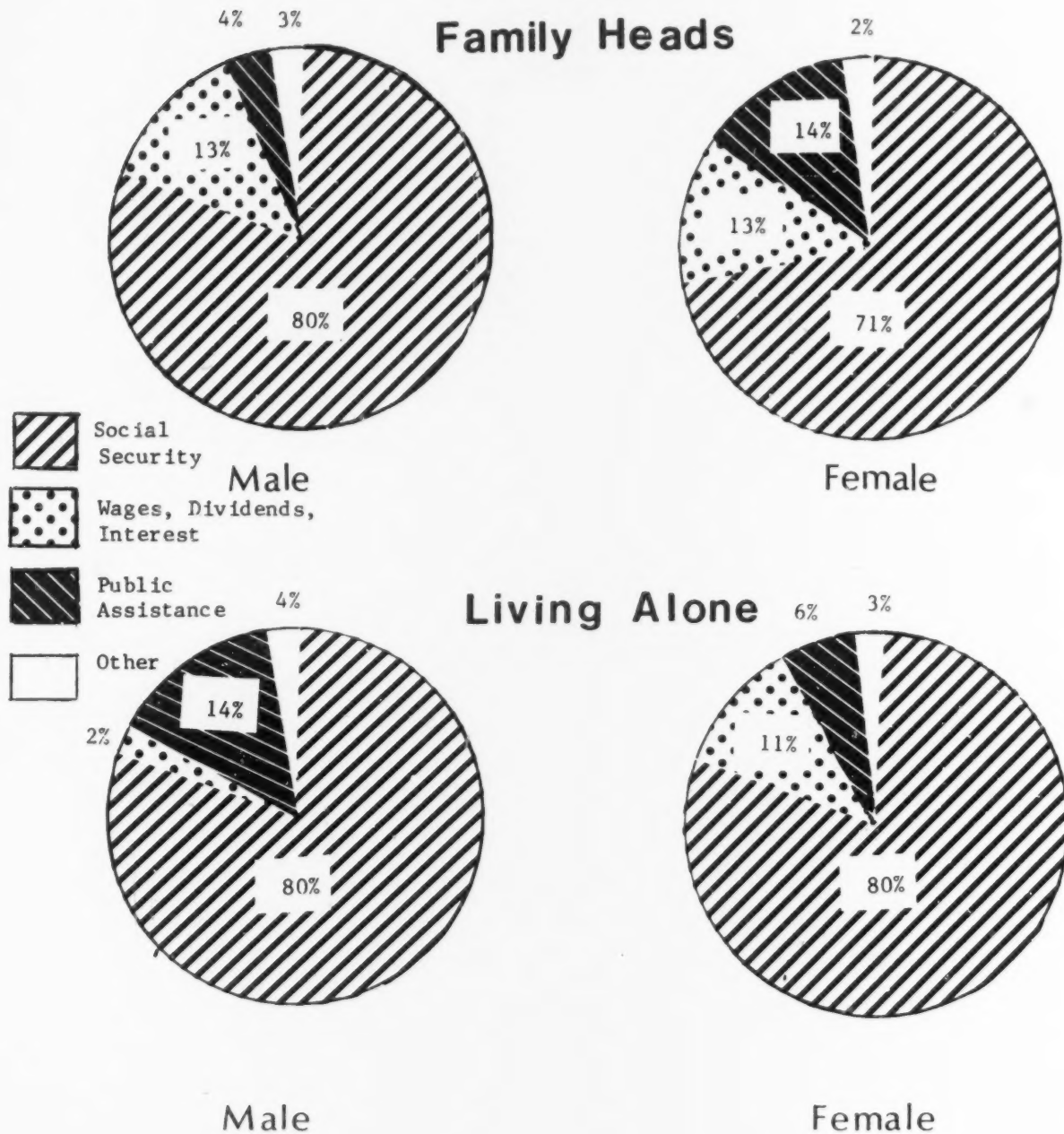


Figure 15: Percent of Elderly Families and Unrelated Individuals in Poverty, Including and Excluding Social Security, Wisconsin, 1979

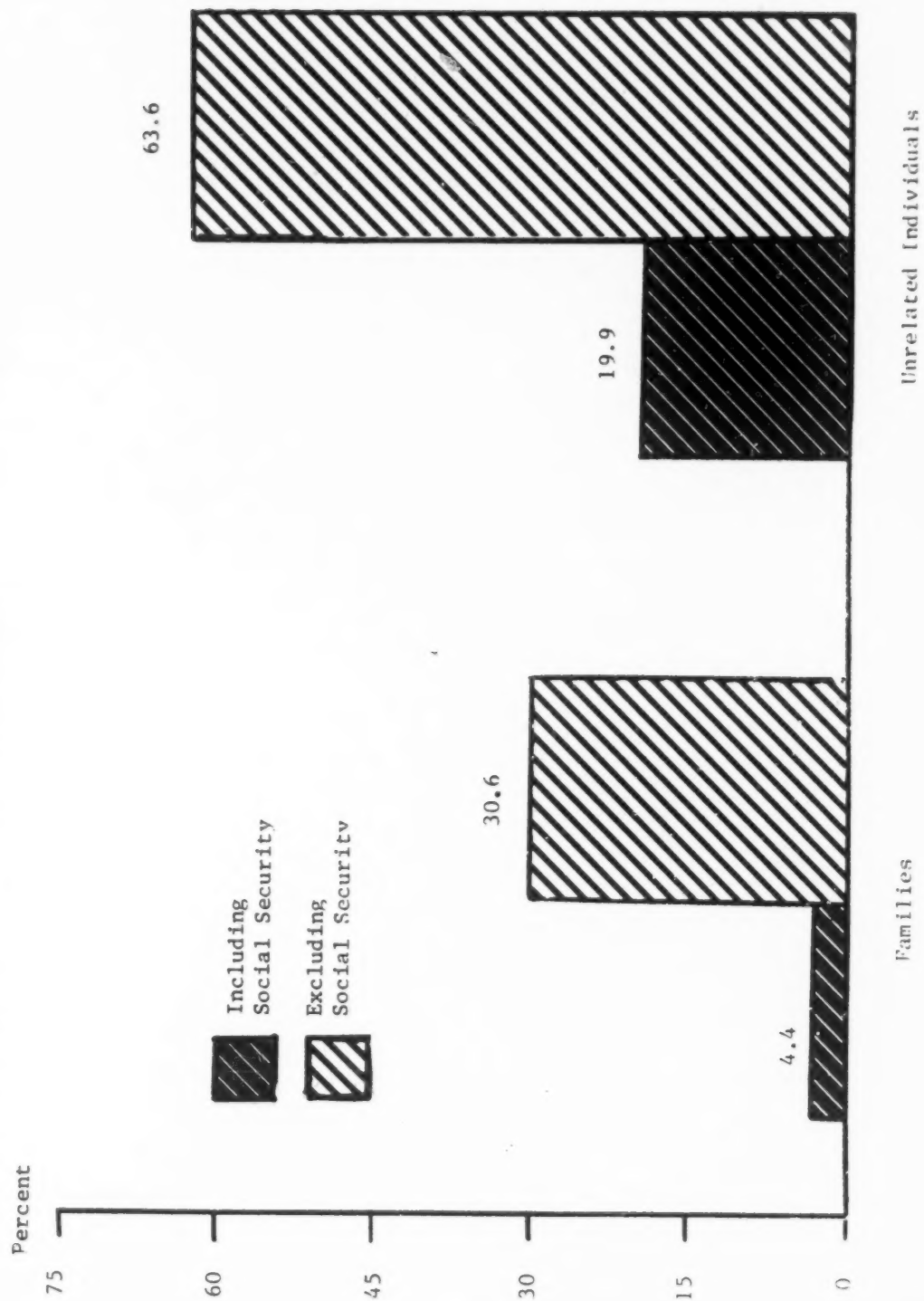


Figure 16: Percent of Elderly Families and Unrelated Individuals in Poverty, Including and Excluding Social Security, by Metropolitan Status, Wisconsin, 1979

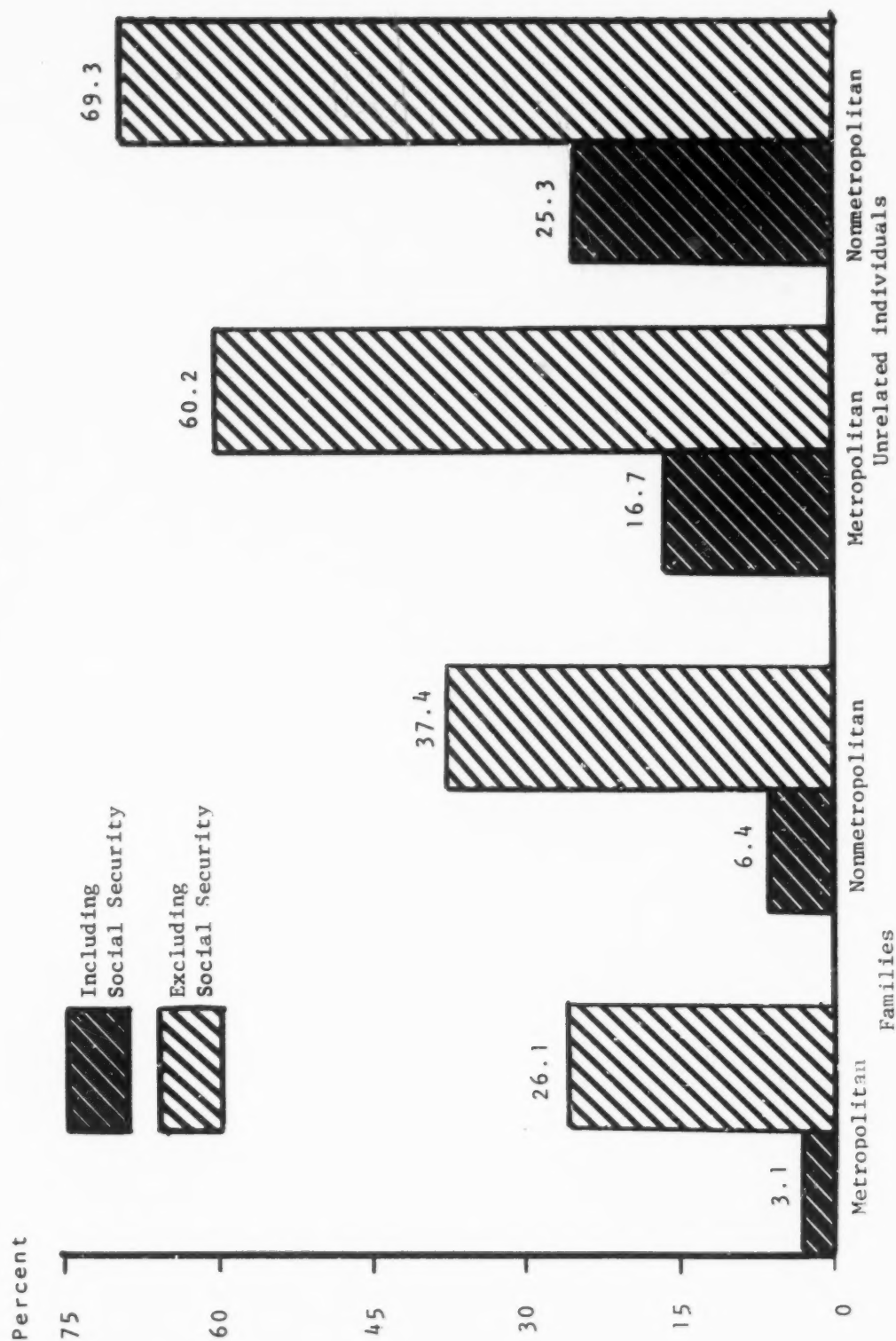


Table 1: Persons 65 Years and Over by Poverty Status by County,
1969 and 1979

County	County Population 65 Years and Over		Persons 65 Years and Over Below Poverty Level*		Percent of County Population Age 65 Years and Over In Poverty	
	1969	1979	1969	1979	1969	1979
Adams	1,450	2,167	520	267	35.9%	12.3%
Ashland	2,404	2,621	826	366	34.4	14.0
Barron	4,792	5,626	1,749	800	36.5	14.2
Bayfield	1,785	2,336	532	335	29.8	14.3
Brown	11,964	15,536	2,481	1,340	20.7	8.6
Buffalo	1,832	2,089	574	260	31.3	12.4
Burnett	1,734	2,160	610	387	35.2	17.9
Calumet	2,347	2,760	668	244	28.5	8.8
Chippewa	4,813	5,947	1,738	701	36.1	11.8
Clark	4,147	4,676	1,578	725	38.1	15.5
Columbia	5,106	5,849	1,238	588	24.2	10.0
Crawford	2,016	2,307	714	286	35.4	12.4
Dane	20,255	24,830	3,452	1,458	17.0	5.9
Dodge	7,435	8,936	1,655	843	22.2	9.4
Door	2,919	3,846	977	394	33.5	10.2
Douglas	5,006	5,839	1,265	592	25.3	10.1
Dunn	3,514	3,745	1,123	433	32.0	11.6
Eau Claire	6,707	8,000	1,681	755	25.1	9.7
Florence	455	662	145	99	31.9	15.0
Fond du Lac	8,776	9,980	2,168	1,069	24.7	10.7
Forest	987	1,323	405	165	41.0	12.5
Grant	5,288	6,026	1,769	941	33.4	15.6
Green	3,277	3,832	747	469	22.8	12.2
Green Lake	2,425	3,020	614	335	25.3	11.1
Iowa	2,327	2,411	773	329	33.2	13.6
Iron	1,110	1,324	321	192	28.9	14.5
Jackson	1,941	2,504	622	338	32.0	13.5
Jefferson	6,588	7,570	1,473	706	22.3	9.3
Juneau	2,461	3,171	931	379	37.8	12.0
Kenosha	10,452	12,333	1,939	762	18.6	6.2
Kewaunee	2,144	2,546	613	274	28.6	10.8
La Crosse	8,414	10,061	2,358	1,026	28.0	10.2
Lafayette	2,061	2,215	662	300	32.1	13.5
Langlade	2,687	3,105	1,105	397	41.1	12.8
Lincoln	2,998	3,739	840	385	28.0	10.3

continued

Table 1 (continued): Persons 65 Years and Over by Poverty Status by County, 1969 and 1979

County	County Population 65 Years and Over		Persons 65 Years and Over Below Poverty Level*		Percent of County Population Age 65 Years and Over In Poverty	
	1969	1979	1969	1979	1969	1979
Manitowoc	8,939	10,299	1,924	1,119	21.5%	10.9%
Marathon	9,309	11,406	2,868	1,315	30.8	11.5
Marinette	4,892	5,842	1,584	766	32.4	13.1
Marquette	1,608	2,084	427	264	26.6	12.7
Menominee	116	237	53	---	45.7	---
Milwaukee	103,561	112,625	18,862	7,829	18.2	7.0
Monroe	3,806	4,128	1,345	558	35.3	13.5
Oconto	3,393	4,110	1,292	600	38.1	14.6
Oneida	2,972	4,502	828	381	27.9	8.5
Outagamie	9,688	11,943	2,109	1,123	21.8	9.4
Ozaukee	3,836	5,386	650	316	16.9	5.9
Pepin	1,000	1,160	371	176	37.1	15.2
Pierce	2,788	2,938	901	356	32.3	12.1
Polk	3,727	4,692	1,099	689	29.5	14.7
Portage	4,146	5,401	1,197	755	28.9	14.0
Price	2,190	2,563	841	448	38.4	17.5
Racine	14,612	16,341	2,570	1,248	17.6	7.6
Richland	2,287	2,556	953	371	41.7	14.5
Rock	11,612	14,051	2,759	1,118	23.7	8.0
Rusk	1,911	2,223	827	269	43.3	12.1
St. Croix	3,339	3,796	893	434	26.7	11.4
Sauk	4,906	5,978	1,314	624	26.8	10.4
Sawyer	1,546	2,096	480	341	31.0	16.3
Shawano	4,271	5,285	1,534	746	35.9	14.1
Sheboygan	10,998	12,270	2,150	731	19.5	6.0
Taylor	1,964	2,389	815	429	41.5	18.0
Trempealeau	3,294	3,827	1,222	643	37.1	16.8
Vernon	3,573	4,082	1,576	687	44.1	16.8
Vilas	1,781	3,090	556	400	31.2	12.9
Walworth	6,747	8,605	1,640	764	24.3	8.9
Washburn	1,706	2,151	544	359	31.9	16.7
Washington	4,726	6,489	932	563	19.7	8.7
Waukesha	13,552	18,789	2,070	1,297	15.3	6.9
Waupaca	5,854	6,107	1,800	858	30.7	14.0
Waushara	2,471	3,252	756	433	30.6	13.3

continued

Table 1 (continued): Persons 65 Years and Over by Poverty Status by County, 1969 and 1979

County	County Population 65 Years and Over		Persons 65 Years and Over Below Poverty Level*		Percent of County Population Age 65 Years and Over In Poverty	
	1969	1979	1969	1979	1969	1979
Winnebago	12,021	14,182	2,489	897	20.7%	4.9%
Wood	6,144	8,125	1,880	913	30.6	11.2
TOTAL	439,903	520,092	106,977	49,785	24.3%	9.5%

*Excludes inmates of institutions, members of the armed forces living in barracks, college students in dormitories.

--- Data suppressed.

Sources: 1970 Census of Population, 4th County summary tape; 1980 Census of Population and Housing: Advance Estimates of Social, Economic, and Housing Characteristics; 1980 Census of Population: General Population Characteristics.

Table 2: Percent Distribution of Wisconsin's Population Aged 65 and Over By Living Arrangement and Marital Status

Characteristics	Total		1979 Income Below Poverty	
	Male	Female	Male	Female
Living Arrangement				
Family Household	78.3%	51.2%	61.5%	22.9%
Lives with spouse	71.6	37.5	55.6	16.5
Nonfamily household	15.4	38.9	36.8	71.9
Lives alone	14.1	37.5	32.8	68.5
Group quarters	6.3	9.9	1.7	5.1
Total	236140	329580	14340	34080
Marital Status				
Married	74.4%	39.3%	57.9%	19.1%
Widowed	15.0	49.7	21.3	62.2
Other	10.6	11.0	20.8	18.7
Total	236140	329580	14340	34080

Source: U.S. Department of Commerce, Bureau of the Census, 1980 Census of Population and Housing, Public-Use Microdata Samples.

RURAL POVERTY IN WISCONSIN*

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Introduction

Poverty in our nation is both undesirable and subject to modification. It is useful to disaggregate the poverty population of the nation by characteristics (1) that are associated with the causes of poverty, or (2) that are associated with different responses to poverty programs and policies. Examining the former may help us explain why poverty exists, and thus provide insight into how it might best be prevented or cured. The latter may lead toward more effective alleviation of poverty's symptoms and the distress it causes.

Poverty is a national issue and much of the public response is through Federal programs and policies, but state and local units of government are also concerned and respond to poverty problems. In

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this report we turn from the national picture to focus on the circumstances in rural Wisconsin and in Wisconsin counties. We search for insights into Wisconsin poverty by disaggregating the population into rural nonfarm, farm, and urban persons. We also look for differences associated with age and sex of the householder, with being elderly, with receipt of Social Security or public welfare benefits, and with labor force participation.

Definition of Poverty

The poverty income thresholds for 1979, as shown in Table 1, are computed by the U.S. Bureau of Census. The standards are weighted for family size and age of the head of the household. For example, a family of four must receive income of less than \$7412 per year in order to be classified as below the poverty level of 1979.

The idea of "being poor" implies being poor compared with someone else. The calculated poverty lines presented in Table 1 can be compared with the average income actually received by Wisconsin families as a subjective test of the "reasonableness" of this concept of poverty. Figure 1 allows one to compare the calculated poverty level incomes with the mean incomes received by Wisconsin families in 1979.

In 1979, the average Wisconsin family had income more than three times as high as the budgeted poverty line. Most persons acknowledge that a family with income near or below the poverty line would indeed lack economic well-being, when compared to the average.

The Number of Rural Poor in Wisconsin

The U.S. Bureau of the Census prepared three estimates of the number of "poor" persons in Wisconsin as part of the 1980 Census of Population. From that data estimates were made based on income below 75 percent of the Federal poverty level, below the poverty level (i.e., below 100 percent of the poverty level), and below 125 percent of the poverty level. Thus, if the Federal poverty thresholds presented in Table 1 seem too high or too low to properly reflect poverty in Wisconsin, estimates of the number of persons in poverty under two alternative measures are available.

Estimates from the Census data are presented in Table 2. "Rural" Wisconsin residents include persons in places of 2,500 population or less, the open country side, and on farms. All rural persons are subdivided into "farm" and "rural nonfarm" in Table 2. The "farm" population consists of persons living in rural places who have at least \$1,000 in sales of agricultural products in a normal year. "Rural nonfarm" includes all other rural persons.

In the Census data a "family" consists of a householder living with one or more related persons. The usual family is a husband-wife combination with or without children. The related persons in the family may also include a second couple, such as a married son living with his parents, or may include other relatives such as parents, grandparents, or in-laws. By the Census definition there were 71,653 farm families plus 375,758 rural nonfarm families in Wisconsin in 1979. About twelve percent of the farm families and six percent of rural nonfarm families had incomes less than the

poverty level that year.

The term "persons" includes everyone living in families, or unrelated individuals, excluding only those persons residing in institutions. There were over 1.66 million persons living in rural Wisconsin in the last Census. There were estimated to be 39,277 persons living on farms whose incomes were below the poverty level, plus 110,440 nonfarm rural poor. This was 13.9 percent of all farm persons and eight percent of all rural nonfarm persons. At the same time, 8.5 percent of all urban persons in Wisconsin were in poverty. Of the approximately 400,000 Wisconsin persons in poverty, about 150,000 lived in rural areas and 250,000 lived in places with 2,500 population or more.

If a more inclusive definition of poverty is used that counts all persons whose income was 125 percent of the poverty level or less, some 226,000 persons in rural Wisconsin were poor in 1979.

Changes in Poverty Over Time

Current poverty levels with benchmarks from the past are reported in Figure 2. The heavy continuous line in the middle of the graph shows the percentage of all persons in the country who were in poverty for each year from 1960 to 1981. Persons in poverty became a smaller percentage of the total population until about 1969, declining from 22 percent in 1960. A leveling of the trend occurred in the decade of the seventies, at about eleven percent. The increase from 1978 to 1981 reflects the general economic problems of unemployment and inflation.

The lower dotted line in the figure connects the estimates in 1969, 1975, and 1979 for all persons (rural and urban) in poverty in Wisconsin, but does not show the level for the years between. The estimates show that the percentage of all persons in poverty in Wisconsin was below the percentage in the nation. The uppermost dashed line in Figure 2 connects the estimates of the percentage of all Wisconsin farm people in poverty in 1964, 1969, 1975, and 1979. The dashed line connecting the years does not show the year-by-year change but only a general path.

In spite of the data limitations, the following points emerge: (1) the percentage of farm poor in Wisconsin is higher than the percentage of all poor in the State, (2) the percentage of Wisconsin farm families in poverty is higher than the national poverty percentage, and (3) while the percentage of farm poor is lower than in 1964, it apparently fluctuated during the late 1970's, and has not gone away. Poverty among Wisconsin farm persons is considerably more prevalent than among the State population as a whole.

Location of the Rural Poor

The rural poor are dispersed in substantial numbers in all areas of Wisconsin. Rural poverty is not simply a problem of "the North." The incidence of poverty and the number of rural poor in all areas make poverty an issue of importance throughout the State.

The percentage and number of farm persons (not of farm families) with income below the poverty level are shown by counties in Figure 3, and for rural nonfarm persons in Figure 4. Shaded

counties are at or above the State mean in incidence (percentage) of poverty.

Percentages are lowest in the southeast third of the State and generally in counties with (or near) major urban centers, but even there the number of rural persons in poverty can be large even though the percentage of poor people is small by comparison within the State.

Employment Status and Poverty

Employment is an important determinant of family income and it might at first seem that persons that are working should not be in poverty. This is not necessarily the case, however, as part-time employment or full-time employment at a relatively low wage may result in annual income below the poverty threshold. In addition, self-employed persons, such as farmers, may be fully employed year round but may still fail to generate an adequate level of family income to meet family needs.

The 1980 Census provides data on the employment status of the person considered to be the "head of the household" in families. In the Census data, such a householder who worked forty weeks or more per year and who usually worked 35 or more hours per week, was considered to have worked "full-time". Less work effort than that was considered to have been "part-time" work. Additional householders were identified who "did not work" at all in 1979. It should be noted that for farm householders the employment might have been either on or off the farm or some combination of the two.

A summary of employment status by place of residence of the householder in Wisconsin families is presented in Table 3. While "urban" and "rural nonfarm" both define only a place of residence, the category "farm" carries an additional implication of occupation as well as place of residence. This is because the definition of "farm" is such that some person or persons must have produced \$1,000 or more in agricultural products for a rural place to be called a farm. This aspect of the definition is probably reflected in the relatively large percentage of householders in farm families who are employed full-time at all degrees of poverty status, relative to urban and rural nonfarm families.

Among families in poverty, for example, 78 percent of the householders in the farm families worked full-time, while 29 percent and 17.6 percent of the householders in rural nonfarm and urban families were so employed. Among urban and rural nonfarm families in poverty who were near poor (had income between 100-124 percent of the poverty threshold), about 40 percent of the householders did not work. This is in contrast to about ten percent of the householders in farm families.

The implications of this difference for public policies to assist the poor should be examined. First, unemployment compensation based on past participation in covered wage work would not help farm operators or other self-employed persons whose past employment history does not include wage work. Other public aid programs for single parent families or families in which the parent or parents are currently unemployed would not reach the householders

on low income farms because of their full-time (or part-time) employment as farm operators, even though their employment resulted in an unacceptable level of family income.

Social Security Benefits and Poverty

Employment in wage work or as a self-employed person will generally result in receiving Social Security benefits after retirement or upon suffering certain kinds of disabilities. Benefits are a transfer over time from an individual's employment years to a later time of reduced income. Social Security benefits totalled \$2.342 billion in Wisconsin in 1979, by far the largest single transfer program. They accounted for 42 percent of all transfer dollars that year. Census data regarding Social Security benefits and poverty are reported in Table 4.

Of particular interest in Table 4 are persons whose incomes were above poverty because of the Social Security benefits received. This included 13.5 percent of farm householders, 32.4 percent of the rural nonfarm householders, and 24.2 percent of the urban householders. The lower percentage for farm householders is influenced in part by the larger share of that group who did not receive Social Security benefits at all, about one third. Note again that "farm" denotes both an occupation and a place of residence. A retired farmer who received farm rent (instead of farm income) might live in the same rural dwelling as before but by definition would no longer live on a "farm". It would appear that a larger share of householders on farms are not yet retired, and many

of those who have retired and receive benefits show up by definition as rural nonfarm or urban residents.

Social Security was not designed as an income maintenance or welfare program. Earners in almost all occupations and at all income levels contribute to it during their earning years and later receive retirement or other benefits. Thus it is not surprising to find that many householders (42 to 49 percent of all householders) who received Social Security benefits would still have had above poverty incomes without that source of income.

Poverty and Public Assistance

In contrast to Social Security, which is a social insurance program that requires an earner to transfer money from the employment years to later retirement years, public assistance programs involve grants to persons who are deemed needy. They are transfers from the public (taxpayers) to disadvantaged persons who meet the program criteria.

The Census provides aggregated data on benefits received under three major programs: Aid to Families with Dependent Children (AFDC), Supplemental Security Income (SSI), and General Assistance. The AFDC program was initiated in 1935 to provide financial help to needy children deprived of support because of the death, incapacity, or absence of a parent. The program was designed primarily to aid families headed by women. In Wisconsin, families may be eligible due to father's unemployment. The federal and state governments share the cost of the program. It totalled \$288 million in

Wisconsin in 1979, the largest income maintenance program after medical assistance.

Supplemental Security Income totalled \$155 million that year in Wisconsin. It pays a nationally uniform minimum cash income to needy aged, blind, or disabled people. Their clientele are persons who are economically disadvantaged and, while their eligibility criteria may not correspond exactly with the poverty thresholds, it might be expected that these programs would mainly assist the poor. The Census data reported in Table 5 give some support to these expectations.

Self-employed persons such as farmers generally have difficulty meeting the unemployment criterion of AFDC and the retired or disabled criteria of SSI. As a result, 96 percent of the farm families and unrelated individuals on farms do not receive any transfers. About eleven percent of the farm families, as well as 25 percent of the unrelated individuals on farms, were in poverty and did not receive any transfers. It should be noted, however, that persons on farms are eligible for and do receive Food Stamps, an important transfer program not reported in the Census data.

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Figure 1: Mean Family Income vs. Poverty Level Income, Wisconsin, 1979

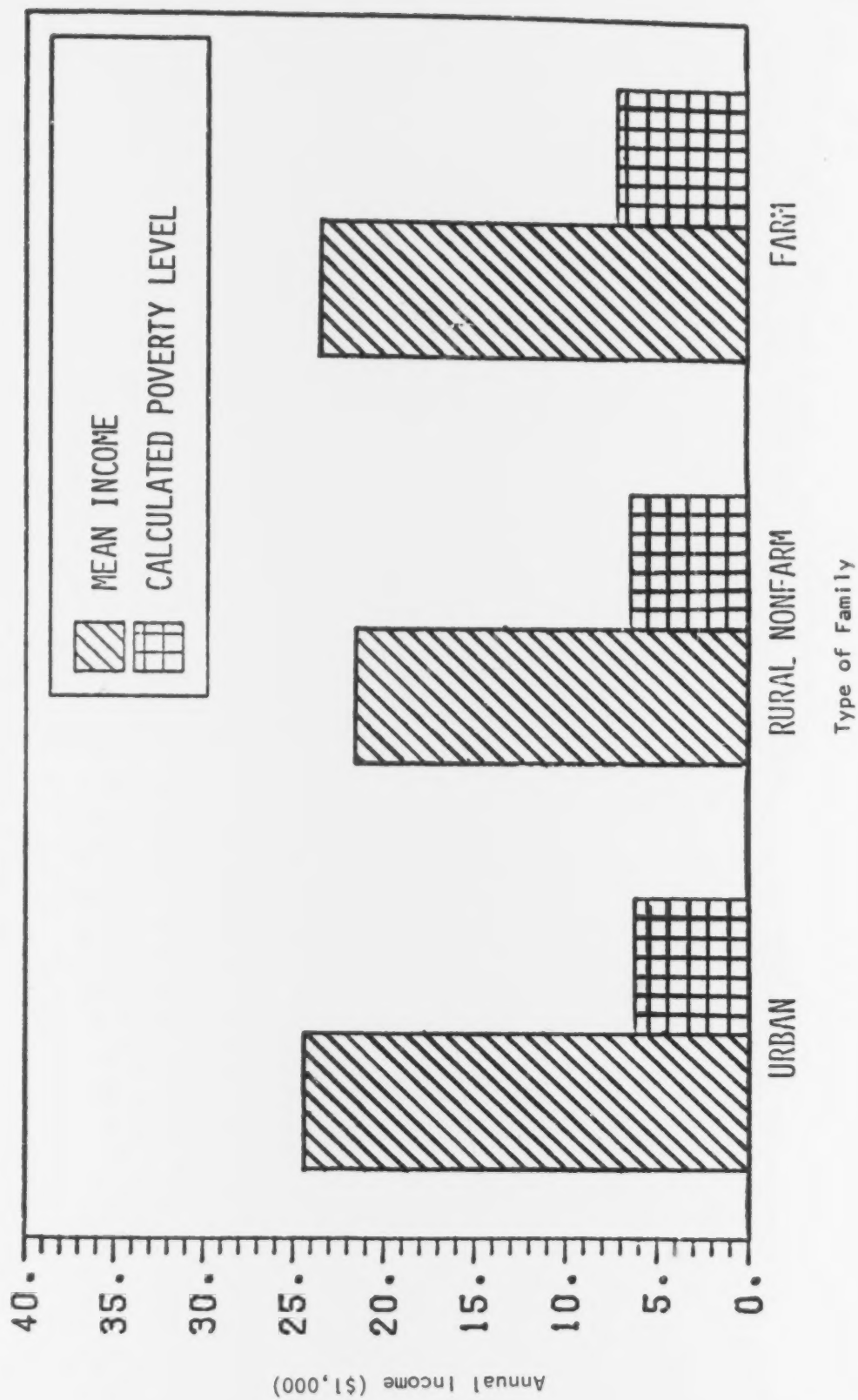


Figure 2: Percentage of Persons Below Poverty Level Income

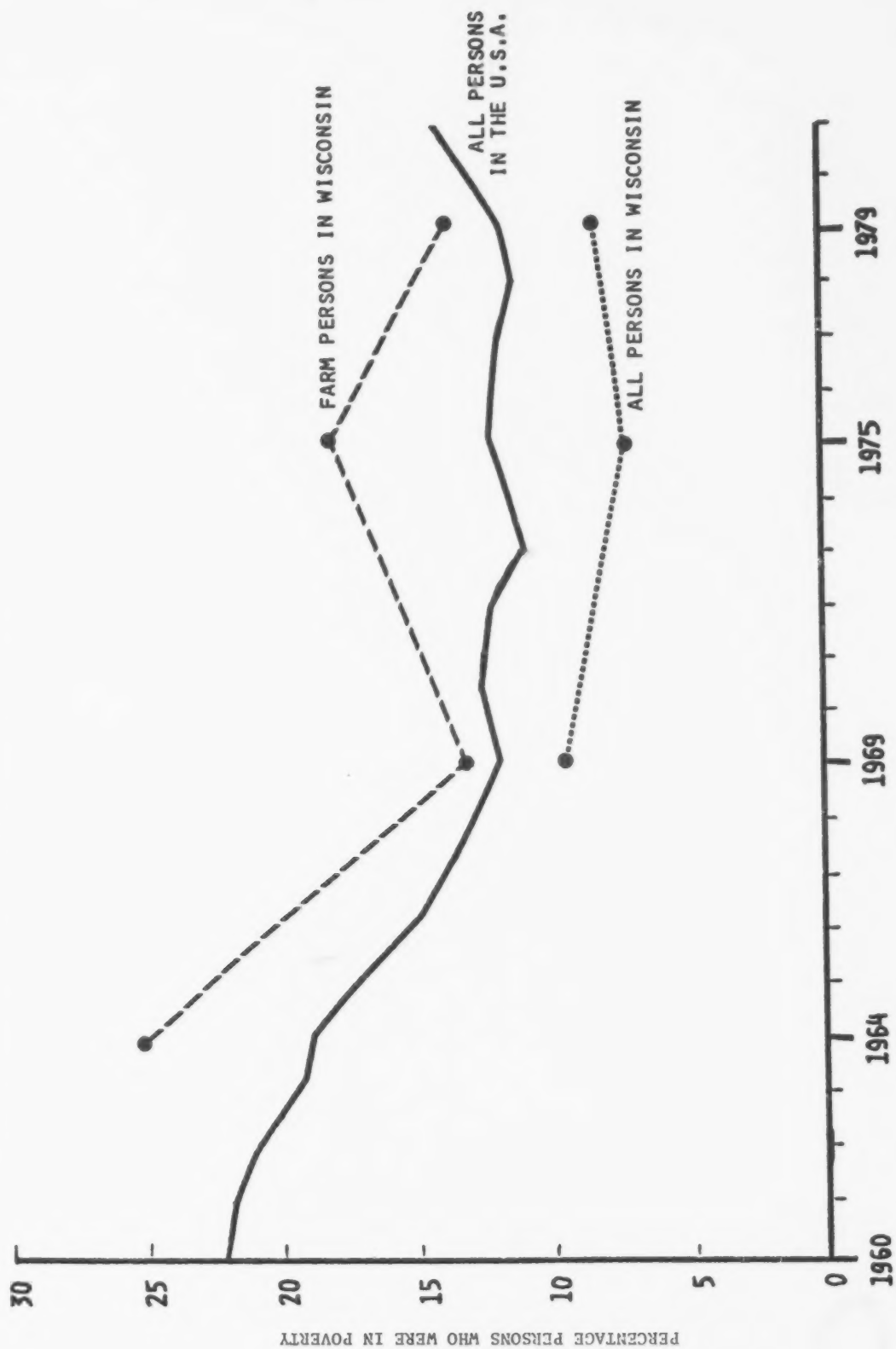
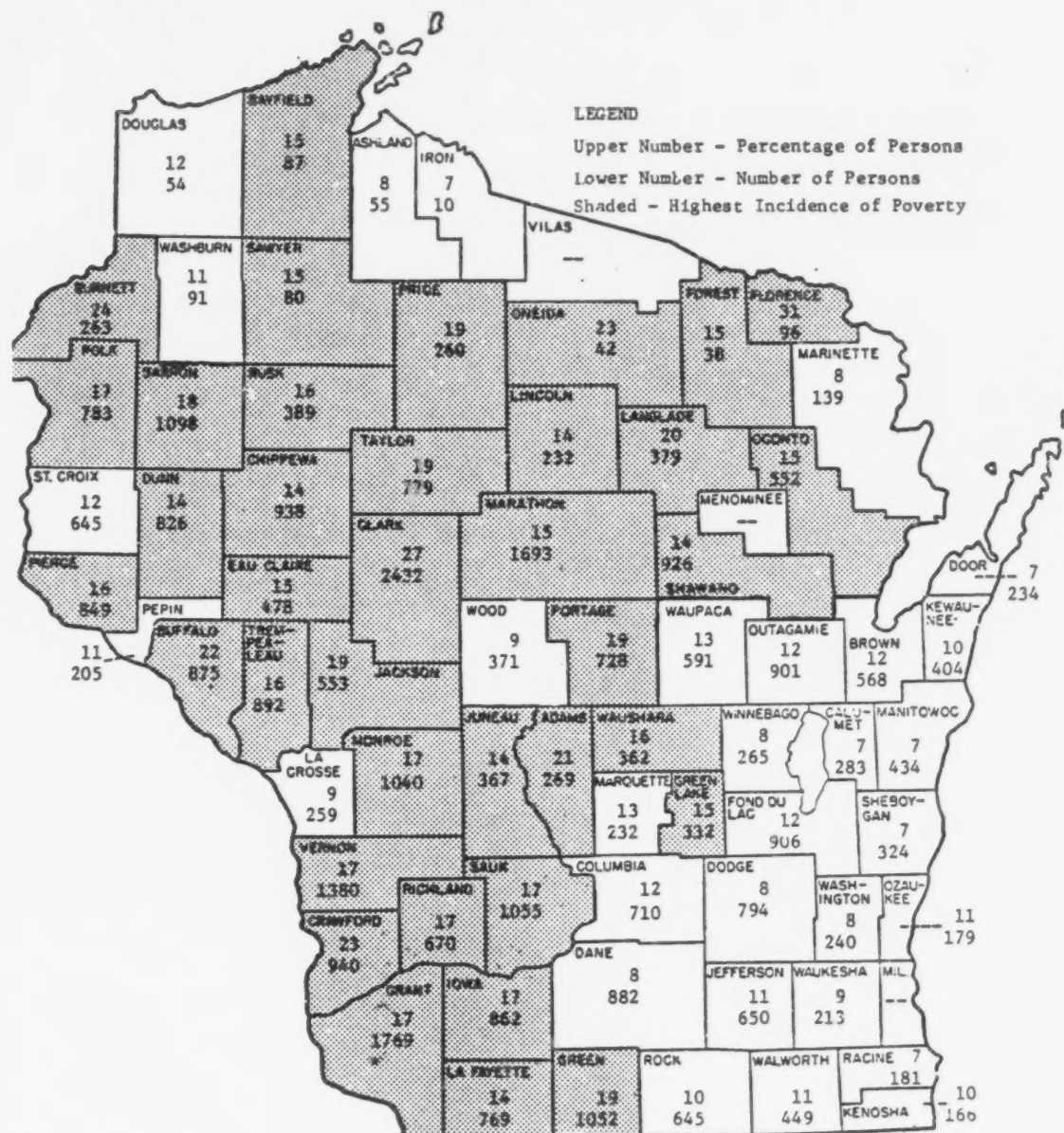


Figure 3: Estimated Percentage and Number of Farm Persons with Income Less Than Poverty Level, 1979.



LEGEND
 Upper Number - Percentage of Persons
 Lower Number - Number of Persons
 Shaded - Highest Incidence of Poverty

County	Percentage of Persons	Number of Persons
Douglas	9	1180
Sawfield	14	1819
Ashtabula	15	1071
Iron	14	916
Vilas	12	1929
Forest	17	1468
Florence	12	470
Marquette	10	4366
Oneida	8	1914
Lincoln	8	918
Langlade	14	1335
Dodge	10	1904
Menominee	18	604
Shawano	10	2247
Door	7	935
Kewaunee	7	579
Van Dusen	6	1693
Van Dusen	6	1750
Sheboygan	4	1281
Ozaukee	3	430
Waukesha	3	1821
Jefferson	5	1339
Green	7	795
Rock	5	1412
Walworth	6	2652
Racine	5	1725
Kenosha	5	1626
La Fayette	10	1204
Grant	10	2579
Howe	10	1145
Franklin	14	938
Richland	11	916
Vernon	13	1803
Monroe	9	1282
La Crosse	6	1275
Jackson	13	1393
Thompson	11	1155
Buffalo	10	783
Pepin	8	1596
Eau Claire	8	1596
Clark	11	2394
Taylor	11	1141
Chippewa	11	2879
Dunn	11	1795
Barren	11	2384
Polk	10	2439
St. Croix	5	1321
Pierce	8	1292
Marathon	8	3353
Wood	7	2132
Portage	8	2043
Waupaca	8	1804
Outagamie	6	1894
Brown	6	1693
Winnebago	5	1144
Calumet	4	464
Manitowish	6	1750
Sheboygan	4	1281
Ozaukee	3	430
Waukesha	3	1821
Jefferson	5	1339
Green	7	795
Rock	5	1412
Walworth	6	2652
Racine	5	1725
Kenosha	5	1626

Table 1: Federal Poverty Line Income by Family Size and Age of Head,
1979

Family Size	Age of Head	Poverty Threshold
1	under 65	\$ 3,774
1	65 or older	3,479
2	under 65	4,876
2	65 or older	4,389
3	all ages	5,787
4	all ages	7,412
5	all ages	8,776
6	all ages	9,915
7	all ages	11,237
8	all ages	12,484
9 or more persons	all ages	14,812

Table 2: Families and Persons by Three Levels of Poverty, Wisconsin, 1979

	Farm		Rural Nonfarm		Urban	
	(Number)	(%)	(Number)	(%)	(Number)	(%)
<u>Families</u>						
All Families	71,653	--	375,758	--	767,612	--
Income less than 75% of poverty threshold						
Income less than 100% of poverty threshold	5,825	8.1	13,474	3.6	25,332	3.3
Income less than 125% of poverty threshold	8,401	11.7	23,586	6.3	45,153	5.9
	11,508	16.1	37,649	10.0	64,073	8.3
<u>Persons</u>						
All Persons	282,307	--	1,380,450	--	2,919,248	--
Income less than 75% of poverty threshold						
Income less than 100% of poverty threshold	27,101	9.6	66,013	4.8	151,801	5.2
Income less than 125% of poverty threshold	39,277	13.9	110,440	8.0	248,096	8.5
	53,408	18.9	173,201	12.5	354,808	12.2

Table 3: Employment of householder by poverty status and place of residence, Wisconsin families, 1979

	Farm	Rural Nonfarm	Urban
Families in poverty (number)	8,401	23,586	45,153
Employment of householder:			
Full time	78.2%	29.0%	17.6%
Part time	10.8	29.8	33.5
Did not work	11.0	41.2	48.9
	<u>100.0%</u>	<u>100.0%</u>	<u>100.0%</u>
Families near poverty ^a (number)	3,107	14,063	18,920
Employment of householder:			
Full time	78.0%	33.2%	27.5%
Part time	12.4	24.7	36.2
Did not work	9.6	42.1	36.3
	<u>100.0%</u>	<u>100.0%</u>	<u>100.0%</u>
All other families (number)	60,145	338,109	703,539
Employment of householder:			
Full time	80.8%	70.0%	72.3%
Part time	12.1	14.4	12.3
Did not work	7.1	15.6	15.4
	<u>100.0%</u>	<u>100.0%</u>	<u>100.0%</u>

^aFamilies "near poverty" had income in 1979 between 100 and 124 percent of the poverty threshold.

Source: Data from Table PB110, 1980 Census of Population.

Table 4: Relationship between poverty status and receipt of Social Security benefits for householders and unrelated individuals age 60 and older, Wisconsin, 1979.

	Farm	Rural Nonfarm	Urban
Householders age 60 and older (number)	17,543	90,550	172,630
Received Social Security Benefits:			
Were in Poverty	4.8%	5.6%	2.0%
Were above poverty because of Social Security	13.5	32.4	24.2
Were above poverty without Social Security	47.1	42.2	49.1
Did not receive Social Security Benefits:			
Were in poverty	2.7	1.3	0.8
Were above poverty	31.9	18.5	23.9
	100.0%	100.0%	100.0%
Unrelated Individuals age 60 and older (number)	3,802	55,231	146,147
Received Social Security Benefits:			
Were in poverty	14.6%	23.2%	12.9%
Were above poverty because of Social Security	26.5	42.4	44.7
Were above poverty without Social Security	33.7	20.0	25.7
Did not receive Social Security benefits:			
Were in poverty	6.8	4.7	4.0
Were above poverty	18.4	9.9	12.7
	100.0%	100.0%	100.0%

Source: Data from tables PB106 and PB107, 1980 Census of Population

Table 5: Relationship between poverty status and receipt of AFDC, SSI, or General Assistance benefits by families and unrelated individuals, Wisconsin, 1979.

	Farm	Rural Nonfarm	Urban
Families (number)	71,653	375,758	767,612
Received AFDC, SSI, or general assistance:			
Were in poverty	.5%	1.3%	2.6%
Were above poverty because of public assistance benefits	.4	1.2	1.3
Were above poverty without public assistance benefits	2.8	3.9	4.2
Did not receive AFDC, SSI, or general assistance:			
Were in poverty	11.2	5.0	3.3
Were above poverty	<u>85.1</u>	<u>88.6</u>	<u>88.6</u>
	100.0%	100.0%	100.0%
Unrelated Individuals (number)	9,531	116,705	447,147
Received AFDC, SSI, or general assistance:			
Were in poverty	1.9%	2.5%	1.6%
Were above poverty because of public assistance benefits	1.2	4.2	2.4
Were above poverty without public assistance benefits	.8	1.5	1.3
Did not receive AFDC, SSI, or general assistance:			
Were in poverty	25.3	21.4	19.7
Were above poverty	<u>70.8</u>	<u>70.4</u>	<u>75.0</u>
	100.0%	100.0%	100.0%

Source: Data from tables PB108 and PB109, 1980 Census of Population

EVALUATION OF IMPACTS OF THE REAGAN BUDGET CUTS
ON WISCONSIN FOOD STAMP COSTS AND CASELOAD*

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I. Introduction and Study Plan

The Omnibus Reconciliation Act of 1981 (OBRA) tightened food stamp and AFDC income eligibility rules, reduced food stamp benefit entitlements for some recipients, and drastically restricted AFDC recipients' ability to combine program benefits with their own earnings. Before OBRA, AFDC recipients were encouraged to work by more generous deductions for work-related expenses and by reducing AFDC benefits for earnings at a much lower rate than after OBRA. (However the OBRA increase in the AFDC benefit reduction rate on earnings takes effect during the fifth month a household is on AFDC.) Because about half of all food stamp recipients receive AFDC, the increased AFDC work disincentives under OBRA would also be expected to affect food stamp costs and caseload. Changes in AFDC benefits meant changes in food stamp payments for households receiving both programs because AFDC is counted against food stamp benefits. For AFDC recipients without food stamps, the reduced opportunity to gain from working greatly increased their incentive to use food stamps. Thus, understanding OBRA's effects on the food

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stamp program requires analysis of relationships between earned income and program benefits before and after OBRA for both food stamps and AFDC.

Two kinds of data available for Wisconsin in the periods before and after OBRA provided an opportunity to evaluate OBRA effects for this study. A representative sample of about 1200 individual households was available from the Wisconsin Basic Needs Survey (BNS), along with monthly caseload data for the entire state from the Wisconsin Computer Reporting Network (CRN). As explained below, the BNS provided more information and thus the study was organized primarily to exploit that survey.

The remainder of this section discusses the study goals and the advantages and disadvantages of the two Wisconsin data bases. Section II evaluates ways in which the OBRA changes in food stamp and AFDC regulations were expected to influence the food stamp program. It distinguishes between the food stamp changes which occurred before the AFDC changes were implemented (OBRA Phase I) and the additional influences from later AFDC changes (OBRA Phase II). The third section of the paper provides an overview and analysis of changes in the Wisconsin food stamp and AFDC programs as documented by the CRN and from summary statistics from the BNS. Section IV analyzes ways in which OBRA affected the food stamp caseload by comparing BNS sample household benefit reciprocity characteristics during the two phases of OBRA. The important advantage of this comparison is that the BNS permits analysis of ways in which changes in food stamp eligibility influenced the caseload.

Study Goals and Organization

The major goals of this study were to understand the following aspects of OBRA:

1. Linkages between changes in food stamp regulations and impacts on the AFDC program, and vice-versa.
2. Changes in the Wisconsin food stamp caseload and food stamp and AFDC benefits for Wisconsin households as a result of OBRA.
3. Changes in Wisconsin household earnings as a result of OBRA.

The timing of the BNS interviews must be discussed to explain how this study was organized to meet these three goals. Other specifics of the survey will be explained below.

After a personal interview which obtained data for calendar year 1980, the sample was randomly divided into four separate panels for subsequent telephone interviewing about household income and expenditures during the previous month. As shown in Table 1, these interviews referred respectively to months in Summer and Fall 1981 and then in Winter 1982.

The Summer 1981 interviews occurred before OBRA was implemented. The OBRA food stamp changes began in October 1981. Thus for the second, third, and fourth randomly selected interview panels, the Fall 1981 interview refers to the post-OBRA period insofar as food stamps alone are concerned. Much of this report is based on comparisons between Summer and Fall 1981 data provided by these three interview panels.

The new AFDC regulations became effective in January 1982. Households with earners who had been on the program for four months

prior to January 1982 were notified of the impending changes in their benefits under OBRA during that month. The BNS Winter interviews refer to the early period in which both of the new OBRA policies were in effect. This fortuitous timing of interviews permits analyses of two separate phases of OBRA: the first, in which only the new food stamp rules were operant; and a second, for which these new rules and the new AFDC policy were both in effect. Likewise, much of the analysis was conducted in two stages, comparing first Summer to Fall 1981 data, and then Fall 1981 to Winter 1982 data. Furthermore, some comparisons of the Summer 1981 to the Winter 1982 data were used to provide a perspective on the overall impact of the administration's new welfare policy for Wisconsin.

Although pre- and post-OBRA comparisons have been used as the basis for other studies of OBRA, the Wisconsin data are unique in that they are taken from a sample of all households (including those not on the AFDC or food stamp rolls) who may have behaved differently after OBRA than before with respect to program participation. As in other studies, there is a major difficulty in understanding OBRA effects in Wisconsin because unemployment continued to increase after OBRA became effective. This had a separate and confounding effect on the earnings and benefits of low income households. In addition, some peculiarities of Wisconsin as a study site should be mentioned. Perhaps the most important of these is that Wisconsin is by no means average. With respect to welfare generosity, it provides relatively high AFDC benefits and

coverage. Less important are the facts that (1) Wisconsin Supplemental Security Income (SSI) recipients are not eligible for food stamps because their food stamp benefit is provided for in their Wisconsin SSI Supplement payment, and (2) Wisconsin has an automated benefit determination and delivery system for both food stamps and AFDC.

Another important fact about Wisconsin is that a relatively high percentage of its AFDC households did not receive food stamps before OBRA. In Wisconsin, 35 percent of AFDC recipients did not get food stamps in 1980. In part, this is due to the relatively generous treatment of work-related expenses in the Wisconsin AFDC program which allowed more Wisconsin households with earnings to rely on AFDC along with their earnings and thus to forego their relatively small food stamp benefits before OBRA. After OBRA restricted income eligibility for AFDC, Wisconsin households had a greater incentive to obtain food stamps than did those in some other states.

The Wisconsin Basic Needs Survey (BNS)

The longitudinal data for detailed analyses of OBRA impacts was collected by the Institute for Research on Poverty Wisconsin Basic Needs Assessment project. Maurice MacDonald was a principal investigator for the project, which began in 1980. Financial support was provided by the Office of Research and Statistics of the Social Security Administration, Department of Health and Human Services, and by the Wisconsin Department of Health and Social Services' Bureau of Economic Assistance.

Detailed information on program participation and benefits, as well as important financial and demographic characteristics, were obtained from an original sample of 2718 Wisconsin households (see Table 2). This total sample included 1220 households representing a cross section of the State's population, supplemented by oversamples of 330 AFDC cases, 226 female-headed households, 485 households headed by an aged person, and 457 low-income households. (To enhance our ability to study program eligibility, low income was defined as below 140 percent of the food stamp program's income eligibility limit.) The sampling list for the AFDC cases was obtained from the Department of Health and Social Services. Random digit dialing with telephone pre-screening was used to obtain the other three oversamples.

A personal interview was obtained in March 1981 from 1821 members of the original sample, for an initial response rate of 67 percent. The reference period for that interview was calendar 1980. It focused on 1980 household income, assets, and other characteristics.

After the initial interview, respondents were allocated to four separate panels for reinterviews by telephone. These reinterviews were conducted monthly after March 1981 for 17 months. Each household was interviewed four times after the initial personal interview. The first three telephone interviews referred to the previous month in 1981 or 1982, while the fourth and final telephone interview was for the entire 1981 calendar year.

In all three monthly telephone interviews extensive information was collected about each household member's program participation and benefits, and other income sources and amounts. In addition, information to update the household roster was obtained, along with detailed reports about household consumption expenditures. By the time of the third telephone reinterviews, the response rate had dropped to 49 percent of the entire original sample and differential attrition had occurred among the subsamples.

One important reason for the low initial response rate for the AFDC subsample was that members were not personally visited, nor were they contacted by telephone. Instead, AFDC sample cases received a letter requesting their permission to be interviewed along with a return postcard for their response. The low initial response rate problem was mitigated by the fact that the female-head and low-income sampling groups also contained AFDC recipients.

An analysis was conducted for sample nonresponse and for attrition from the survey between interview waves. The analysis focused on two main issues. The first was that the sample actually obtained for the first interview differed from that which was originally intended because of the differential nonresponse across sample types. Despite this fact, it was possible to derive a new set of sample weights to produce a valid representative sample of the Wisconsin population for the Summer 1981 telephone interviews.

The second issue was whether the households who did not respond to the Fall 1981 or Winter 1982 interviews had systematically different characteristics than those who remained in the survey.

Many different characteristics were examined for this purpose. Although there were some statistically significant differences between waves for certain characteristics, their magnitude was not found to be important. Therefore, the Summer 1981 weights were applied to all three monthly interviews to get representative samples of Wisconsin households during Summer 1981, Fall 1981, and Winter 1982.

Based on those same results, it was possible to analyze OBRA effects by restricting the analysis samples to households who responded to the relevant monthly interviews. Hence, the sample for analysis of the OBRA food stamp changes alone consisted of households who responded to both the Summer and Fall 1981 interviews, while for the analysis of both the food stamp and AFDC changes the sample included only those members who had responded in both Fall 1982 and Winter 1982. The number of cases therefore differs between the two analyses. In addition, some respondent households failed to provide enough information about certain key variables and were thus excluded from the analysis samples. These key variables were respondent or household earnings, and the benefit amounts from AFDC, General Assistance, Food Stamps, Social Security, or Supplemental Security Income.

Food Stamp Eligibility Determination. Probably the most important change in the food stamp program under OBRA was the new gross income limit for eligibility, set at 130 percent of the OMB poverty line. Separating food stamp eligibles from ineligibles provides a perspective on Wisconsin households which is helpful in

understanding the participation impacts of all of the OBRA provisions. The BNS monthly interviews obtained the income and expenditure information necessary to determine household countable net income (pre-OBRA) and gross income (post-OBRA) for comparison with the relevant food stamp income limit. In particular, the interviews contained questions about household shelter costs and expenses for the care of dependents. These permitted computation of the combined excess shelter-cost dependent care deduction. For shelter costs, the Wisconsin standard allowances for utility payments were added to reported household rent if the household's rent did not include those utilities. The rent amount was used alone if all utilities were included. For homeowners, all regular home ownership costs were added to the standard utility allowances. Dependent care expenses included payments for child care for employed household members, and for nursing care and household help to care for elderly dependents.

The Basic Needs data were less ideal for the food stamp program resource limits on assets. Comprehensive asset information was collected during the first personal interview in Spring 1981, but was not updated during the monthly telephone interviews. The assets test was therefore performed for each telephone interview as if the household's assets had not changed since Spring 1981. Furthermore, the list of assets was limited only to liquid assets, and did not include some other countable resources (such as certain vehicles not used for employment). Although it is generally unlikely that many of the household's assets changed very much within the period of

interest, some (e.g., those who became unemployed and had insufficient unemployment compensation benefits) may have reduced their assets as the recession progressed during 1981, which would have changed their food stamp eligibility status. This potential bias in food stamp eligibility classification is probably somewhat greater for the Fall 1981 to Winter 1982 comparisons because by then more time had elapsed since Spring 1981, and because unemployment increased more rapidly in late 1981.

II. Evaluating OBRA Food Stamp and AFDC Policies

Expected Impacts of the OBRA Food Stamp Changes (Phase I)

To save food stamp program costs, OBRA restricted benefit entitlements and reduced both the income limit for eligibility and the deduction from earnings. After further evaluating these changes, their interaction with the new AFDC rules will be considered.

1. Restricted Benefits. Much of the cost savings were to be accomplished by delaying scheduled benefit increases with a freeze or adjustment to the cost of the Thrifty Food Plan, and by freezing dollar limits on what had been indexed deductions from countable income. Because the rate of inflation fell after OBRA, delayed indexation necessarily saved less than anticipated. Other new restrictions have therefore been more important than might have been expected. One of these is the switch from paying an entire month's benefits to prorating the first month's benefits according to the number of days remaining in the month. Also important are the

miscellaneous provisions restricting benefit availability for specific small portions of the caseload (boarders, strikers, aliens, and college students).

2. Reductions in the Income Eligibility Limit. OBRA established a gross income limit at 130 percent of the official poverty line for all households except those containing an elderly or disabled person. Before OBRA, income eligibility referred to net income and the limit was set at the official poverty line. Because net income was computed after allowable deductions for 20 percent of earnings, an \$85 standard deduction, and up to \$115 in countable shelter costs and/or dependent care expenses, households with substantial earnings could have had gross incomes greater than 130 percent of the poverty line and still qualify for benefits because their net incomes were below the pre-OBRA income poverty limit. Thus, the new limit on gross earnings made some recipients' households with relatively high earnings, or other income (e.g., AFDC or Unemployment benefits) ineligible. Some of these households might have worked more hours after they became ineligible to replace the food stamps they lost. This type of labor supply response would not have changed the impact of the new eligibility limit on program costs and caseloads.

3. Reduction in the Earnings Deduction. The food stamp benefit reduction, or tax rate, on earnings was increased in that the earned income deduction was set at 18 percent instead of the 20 percent allowed before OBRA. It is unlikely that this small reduction in the net gain from working while on the program induced any labor supply response.

Another reason that OBRA may have changed food stamp costs and caseload is that potential recipients may have become confused or stigmatized by the media attention to the Reagan budget cuts, such that more eligibles may have decided not to apply for benefits than normally would have. Still, the two main changes in food stamp program structure that affected incentives to participate or to work were the new gross income limit and the reduced earned income deduction. Because the change in the earned income deduction was small, the main effect of the OBRA food stamp change was simply to eliminate eligibility for recipients whose gross incomes exceeded 130 percent of the poverty line. It is also worth repeating that those recipients who lost eligibility may have worked more to replace their food stamps.

Additional Impacts from the OBRA AFDC Changes (Phase II)

Because most AFDC households are eligible for food stamps, and the majority receive them, understanding the most important OBRA impacts on the food stamp program also requires discussion of the food stamp and AFDC changes together.

1. Reduction in the Income Eligibility Limit. Before OBRA, AFDC recipients with relatively high work-related expenses could have had incomes above the new AFDC income eligibility limit at 150 percent of the State's AFDC needs standard and thus received AFDC until their earnings after deductions rose to eliminate their AFDC payment. With the new income limit, eligibility ends much more abruptly. According to Wisconsin Department of Health and Social Services estimates on the immediate impacts of OBRA in Wisconsin,

about five percent of the AFDC cases had their eligibility terminated for this reason. To the extent that terminees who were not receiving food stamps responded by reducing their earnings in order to re-enter AFDC and by taking food stamps, the food stamp caseload may have increased because of the new AFDC limit.

2. Reduced Incentives to Work While on AFDC. The changes in the AFDC benefit reduction rate are particularly important because of behavioral responses that would have affected AFDC benefits and earnings, countable against food stamp benefits. Before OBRA, AFDC did not tax the first \$30 of earnings, and the remainder was taxed at a 67 percent rate. However, the actual effective benefit reduction rate was substantially less than 67 percent because of allowable deductions for work-related expenses. Now, after four months on AFDC, the benefit reduction rate on earnings rises to 100 percent, and there are much more restrictive deductions for work-related expenses and child care. The work expense deduction was capped at \$75 per month, whereas prior law required work expenses to be itemized but imposed no limit on the amount deducted. Similarly, the childcare deduction was capped at \$160 for the first child, and \$120 for each additional child.

Over a longer period, those households that desire a higher total income than now provided by AFDC alone or by AFDC and food stamps have a much stronger work incentive to become self-sufficient than they did before OBRA. However, another likely response to the new AFDC rules is to reduce work hours because of the dramatic

increase in the benefit reduction rate. Figure 1 illustrates these potentially different effects of OBRA.

In Figure 1, line OR represents the earnings opportunities available to a household without AFDC. If the household received AFDC before OBRA the household could combine its earnings with AFDC, to have the income opportunities described by OGCR. The reduced gain per hour of work in the range GB reflects the AFDC benefit reduction rate before OBRA. After OBRA the increase in the benefit reduction rate to 100 percent of earnings after four months on the program changes the income opportunities to those represented by OGCBR. In the range GC, additional work hours will not increase total household income while on AFDC. A household with the pre-OBRA work hours and income represented by point 1 in the range GB can decide to quit work entirely (since there is no benefit to work in the range GC) and remain on AFDC, or to increase work hours by moving to a point like 2, off AFDC and with more earnings. For those who chose to quit work, AFDC benefits actually increased.

Effects on the Food Stamp Caseload from OBRA/AFDC Changes

For AFDC households who were receiving food stamps before OBRA, the reduced welfare income opportunities after OBRA would increase their incentive to remain on the food stamp program as long as possible to cushion the AFDC changes. This would tend to increase the duration of their food stamp reciprocity and thus raise the number of post-OBRA food stamp cases relative to the pre-OBRA

period. For AFDC households who were not receiving food stamps before OBRA, the AFDC changes increase their incentive to join the food stamp program, which would also increase the food stamp caseload relative to the pre-OBRA period. Hence an important implication of the OBRA-AFDC changes is that the reduced opportunity to combine earnings and AFDC would be expected to increase the food stamp caseload. The food stamp cost savings from OBRA would therefore be reduced during the second phase, in which both the food stamp and AFDC changes were in effect. More generally, the analysis of the AFDC changes reveals that an understanding of the effect of OBRA on the food stamp program requires that we consider all households, including those who did not receive food stamps before OBRA.

These insights into the most important OBRA-AFDC changes affecting the food stamp program have been derived from analysis of the work-other activities choice. Other aspects of the 1981 AFDC legislation could also have affected the behavior of low income households.

- . A new AFDC limit on assets may have reduced the pool of households eligible for both AFDC and food stamps and thus changed the mix of households who received both. OBRA limited the maximum value of real and personal property allowed for AFDC eligibility to \$1,000, excluding the home, a car, and "basic items" such as clothing and furniture. Furthermore, states are also no longer allowed to exclude liquid assets and income-producing property from the determination of household resources. In Wisconsin, about three percent of the caseload lost their eligibility because of this provision.
- . With respect to participation and labor supply responses, another concern is that OBRA greatly expanded the power of states to initiate compulsory work experience and work registration and job search programs under the new Community Work Experience Program (CWEP). During the period analyzed for this report, Wisconsin did not change its work requirement policies for AFDC households.

- . OBRA permits states to count food stamps and housing subsidies as income and thus to reduce AFDC benefits up to the amount allocated for food and shelter in the state needs standard. This provision was not adopted in Wisconsin.
- . If a family receives a lump sum payment, it loses eligibility for the number of months equal to that payment divided by the needs standard. Under the previous law, the household would lose at most one month of eligibility for a one-time lump sum payment.
- . Under OBRA, step-parent income is to be treated in the same way as custodial parent income after deductions are made for the support of step-parents' dependents. This probably reduced the number of relatively high income AFDC recipient households.
- . OBRA also redefined the household eligible for AFDC in two other ways. First, students not in high school are not eligible. Previously, AFDC benefits were available for students up to age 21 at state option. Second, pregnant women are no longer eligible until the seventh month of their pregnancy.
- . Also relevant for AFDC households is that some states have instituted charges for Medicaid usage that may affect perceptions of the gains from receiving welfare.

Although it was not feasible to examine these aspects of welfare generosity in this study, their potential confounding influence serves as a precaution against drawing too finely grained inferences from pre- and post-OBRA data presented in the next two sections.

III. Overview of Post-OBRA Changes in Wisconsin Program Costs and Caseload

This section is intended to provide a general understanding of how Wisconsin food stamp and AFDC program characteristics changed during the two separate phases of OBRA. It also considers the role of changing unemployment rates. We begin with aggregate caseload data from the Wisconsin Computer Reporting Network and then turn to summary statistics from the Basic Needs Survey.

Figures 2 and 3 display the food stamp and AFDC program caseload trends and fluctuations for Wisconsin since 1975. The discontinuities at the beginning of 1979 correspond to the elimination of the purchase requirement in the Food Stamp program. For the period before 1980, the caseloads for the AFDC-regular and AFDC-unemployed parent and food stamp programs all display seasonal increases during Winter and then a leveling off until mid-Summer. The graph for AFDC-unemployed also shows the direct influence of the economic cycle, and these cyclical movements are reflected in the pre-1980 food stamp caseload as well.

During 1980 Wisconsin tied delivery of federal energy assistance payments to food stamp eligibility, which accounts for the dramatic rise in the food stamp caseload during Winter 1981. In that same year, all counties were finally added to the Wisconsin Computer Reporting Network. Unfortunately, these facts prohibit any useful comparison between 1980-1981 and 1981-1982 food stamp and AFDC caseload trends to detect the influence of OBRA relative to normal seasonal caseload fluctuation.

Nevertheless, the onset of the new food stamp regulations is clearly visible as the drop in the food stamp caseload during late 1981—a period in which seasonal increases in that caseload would normally occur. That food stamp decline was immediately reversed with the implementation of the new AFDC regulations in January 1982, and the drastic drop in the AFDC caseload at that time displays this change more directly. Because of the contemporaneous rise in

unemployment, the AFDC-unemployed caseload continued to grow throughout 1981 and 1982.

Table 3 provides further aggregate details from the Wisconsin Computer Reporting Network about average program characteristics for the months corresponding to those reported about in the Basic Needs Survey. The AFDC figures refer to the combined AFDC-unemployed and AFDC-regular caseloads. The table reveals some clear patterns. There were substantial reductions in food stamp costs and caseload under OBRA during Fall 1981. These were associated with a reduction in the percentage of food stamps cases with earnings and a reduction in those earners' average earnings. In Winter 1982 the food stamp program grew rapidly while AFDC costs and caseload declined. (During that time energy assistance payments were no longer tied exclusively to food stamp reciprocity.) Although the percent of the food stamp caseload with earnings remained stable, those for AFDC dropped as did the average earnings of households on AFDC. The food stamp earners actually displayed some increase in earnings. This stability of earnings and earners in the food stamp caseload is not consistent with the increase in the unemployment rate shown at the bottom of the table and probably results from AFDC-OBRA induced changes in the composition of the food stamp caseload. In particular, this increase in the percentage of food stamp households with earnings could have resulted from former AFDC-only households with earners who left AFDC because of the new AFDC work disincentives and entered the food stamp program to replace part of the AFDC benefits they lost.

In terms of Wisconsin payments for both the AFDC and food stamp programs, row 3 of Table 3 shows an increase during Fall 1981, despite tighter food stamp program rules. This increase was apparently due to the recession. However, as the recession became worse in Winter 1982, total assistance payments actually fell ten percent.

Figures 4 and 5 present all of the relevant changes in Table 3 graphically as percentage increases or decreases for the Summer to Fall 1981 or Fall 1981 to Winter 1982 comparisons. The rightmost bars in each of these graphs provide what may be the most convenient summary of the difference in the impact of the two phases of OBRA on the food stamp program. Figure 4 shows that the percentage of AFDC cases with food stamps declined five percent when only the new food stamp policy was in effect. In the second phase the percentage of AFDC cases with food stamps rose by 25 percentage points. Referring to Figure 5, the average benefits of food stamp households declined only one percent in Fall 1981. Although normal increases in shelter cost deductions raise food stamp benefits somewhat every winter, it is still striking that average food stamp benefits rose 14 percent during Winter 1982. These aggregate data seem to imply that the OBRA food stamp policy would have been more effective in reducing program costs if the new AFDC changes had not occurred.

Summary data from the Basic Needs Survey are presented in Table 4 to provide an overview of the gross changes in reciprocity/eligibility status and in the averages and distribution of benefits and earnings between the two OBRA phases for all

Wisconsin households, including those not appearing in the Computer Reporting Network because they did not receive program benefits. The patterns of change in reported household characteristics between waves of the Basic Needs Survey are quite consistent with those just discussed for the Wisconsin aggregate welfare caseload and unemployment statistics. As in the Caseload data, Table 4 also shows a Fall 1981 decline in the average food stamp benefit amount and then a marked increase during Winter 1982. The patterns for respondents' earnings and household earnings and gross income reversed those for food stamps. These variables all rose during the Fall and then declined in the Winter. The average of the Basic Needs Survey AFDC recipients' benefits also followed the pattern of the caseload data. AFDC benefits rose in the Fall and then again in the Winter. Note further that the average AFDC and food stamp benefit reports generally agree with those from the Wisconsin Computer Reporting Network. Hence, in addition to providing more information about the earnings and incomes of all Wisconsin households, Table 4 suggests that the Basic Needs Survey is a trustworthy source of data on Wisconsin's low income population.

IV. Analyzing OBRA Impacts With the Basic Needs Survey

Impact of OBRA Phase I on the Food Stamp Caseload

Of the main food stamp changes, the gross income limit was undoubtedly more important for the caseload than the tighter earnings deduction. For this reason, the analysis of OBRA Phase I

effects on the caseload was designed to study only the impact of the gross income limit.

Table 5 presents the distribution of all Wisconsin Basic Needs Survey households according to their reciprocity and food stamp eligibility for Summer 1981, Fall 1981, and for a simulation of what their Fall 1981 situation would have been if there had been no changes in the economy nor any household behavioral responses to the new OBRA food stamp income eligibility limit. BNS households were classified for this and subsequent work in the following steps. First, among food stamp recipients, those who received only food stamps were separated from those who received food stamps and AFDC (rows 1 and 2 in Table 5). Second, the remaining AFDC recipients were also divided into two groups according to whether or not they were eligible for food stamps (rows 3 and 4). Third, households without AFDC or food stamps were then classified according to their food stamp eligibility (rows 5 and 6).

The OBRA simulation for Fall 1981 was performed by applying the new OBRA Food Stamp income eligibility screen to the Summer 1981 income data for households. It was assumed that, except for the OBRA income eligibility changes, households would have remained in their Summer 1981 reciprocity-eligibility groups during the Fall of 1981. Thus, for example, Summer 1981 food stamp households who had incomes above the new gross income screen were assigned to the ineligible category as their simulated Fall 1981 reciprocity/eligibility status, along with Summer 1981 AFDC Food

Stamp Eligibles, and other Food Stamp Eligibles who had incomes above the gross income screen.

Of course, the actual reciprocity-eligibility distribution of households in the Fall of 1981 resulted from the impact of other OBRA food stamp changes, as well as other factors. In addition to the effect of the new OBRA income limit, the Fall 1981 distribution was also affected by:

- . behavioral responses to the new gross income limit
- . changes in household composition that affected the need for benefits as well as affecting eligibility status
- . seasonal unemployment
- . cyclical unemployment

To restate, the simulated Fall 1981 distribution in Table 5 represents that which would have resulted from the new gross income eligibility limit alone, while actual Fall 1981 household reciprocity and eligibility were influenced by many factors.

The direct effect of the OBRA gross income screen was isolated by comparing the percentages of all Wisconsin households in each reciprocity-eligibility group between Summer 1981 and Fall 1981 simulated and actual percentages. According to the simulation, 3.2 percent of all households would have lost their food stamp eligibility because of the gross income screen (and this figure refers only to households who were not on the foodstamp caseload). Actually, only 2.1 percent of Wisconsin households who had not been receiving food stamps became ineligible. Apparently, factors other than the new gross income screen (e.g., rising unemployment)

substantially offset this effect of OBRA. Similarly, for Summer 1981 food stamp recipients, fewer households (0.4 percent of all Wisconsin households) actually became ineligible than were simulated ineligible (1.1 percent).

Another way to summarize these findings is to say that the recession and other effects reduced the decline in the caseload by 36 percent of the potential simulated OBRA reduction for households who received food stamps in Summer 1981. Those same offsetting influences restricted the effect of OBRA on food stamp eligibles without food stamps by 34 percent less than was simulated.

Impacts of OBRA Phase II on the Food Stamp Caseload

As discussed in Section II, one of the most important consequences of the new AFDC policy was to increase the incentive for AFDC households to enter or remain on the food stamp caseload. Separating this effect from that of other factors was the primary focus of the Phase II caseload analysis, which began by establishing how much of the caseload increase between Fall 1981 and Winter 1982 was due to AFDC households.

Table 6 compares the Fall 1981 and Winter 1982 reciprocity/eligibility distributions. One and three-tenths percent more of all households received food stamps after the new AFDC policy, whereas 1.2 percent fewer received AFDC afterwards. And, as could result from the recession alone, the percent of food stamp ineligible households dropped by one and six tenths.

Further detail regarding the reasons for these Winter 1982 changes was obtained by comparing turnover in reciprocity and

eligibility during OBRA Phase I to OBRA Phase II. (See Tables 7, 8, and 9.) Examining those turnover tables readily reveals increased flow into the food stamp caseload during Winter 1982 from AFDC households who were not receiving food stamps in Fall 1981 as well as from the Other Food Stamp Eligible group during Winter 1982. During Fall of 1981 none of the AFDC households eligible for food stamps during Summer 1981 became food stamp recipients. In Winter 1982, 23.3 percent of Fall 1981 AFDC "only" food stamp eligibles and 18.9 percent of Fall 1981 AFDC "only" food stamp ineligibles received food stamps. Two percent of Summer 1981 non-AFDC food stamp eligibles received food stamps during Fall 1981; 3.5 percent of these other food stamp eligibles became food stamp recipients during Winter 1982.

The pie charts in Figure 6 depict the percentages of the Fall 1981 and Winter 1982 food stamps caseloads attributable to their respective Spring 1981 and Fall 1981 sources by previous recipiency and eligibility.

Although the share of the food stamp caseload which received both AFDC and food stamps three months earlier remained at about half of the caseload, the share of households who had previously received only food stamps dropped from one third to less than one fifth during Winter 1982. AFDC households without food stamps in the Summer of 1981 were only about two percent of the Fall 1981 caseload, but this same type (from Fall 1981) comprised eleven percent of the Winter 1982 caseload. It is also striking that the share of the caseload from food stamp ineligibles other than those on AFDC rose from seven to eleven percent. Although the bulk of

this was due to the recession, some part of it may stem from households who had become AFDC eligible, avoided AFDC because of its newly restrictive policy, but who did get food stamps.

By weighting the differences between the Fall and Winter rates of flow into and out of the food stamp caseload by the relative size of the groups from which these flows originated, it is possible to estimate the percentage share of the 13,000 household Winter 1982 caseload increase that was due to the various Fall 1981 groups. This analysis of the components of change in the food stamp caseload during phase II of OBRA revealed the following:

- . 17 percent of the Winter 1982 caseload increase was due to increased numbers of households without AFDC remaining on food stamps.
- . 26 percent was due to increased numbers remaining on both food stamps and AFDC.
- . five percent was due to AFDC-food stamp eligibles entering the food stamp caseload.
- . 15 percent stemmed from AFDC-food stamp ineligible.
- . 16 percent of the increase was caused by food stamp eligibles who had not received AFDC during Fall 1981.
- . 21 percent was caused by food stamp ineligible households who had not received AFDC.

Overall then, 46 percent, or nearly half of the caseload increase, was associated with either increased persistence by, or entrance from, AFDC households. Thirty-seven percent of the rise in the caseload came from non-AFDC households who were either eligible

or ineligible for the stamps in the Fall. The remaining 17 percent is attributable to households who had received only food stamps before.

V. Summary

The main results of the evaluation of ways in which changes in the food stamp and AFDC programs under OBRA affected food stamp costs and caseloads can be discussed with respect to two separate phases of OBRA. In the first phase, the food stamp program imposed a gross income limit for eligibility at 130 percent of the official poverty line, which reduced the food stamp caseload and the number of food stamp eligible households. Along with some reduced benefit entitlements and a somewhat less generous work expenses deduction, this new income limit became effective in October 1981. Beginning in January 1982 the second phase of OBRA implemented two important changes in the AFDC program which affected low income households eligible for food stamps. A gross income limit was also implemented for AFDC eligibility, and the extent to which AFDC recipients could combine work and welfare was restricted drastically after their fourth month on the program. In Wisconsin, this meant that many AFDC recipients who had been on the program during September 1981 had their benefits reduced in January 1982. Thus, in the second phase of OBRA, AFDC households who were not receiving food stamps had a much greater incentive to enter the food stamp program than in the first phase under the new food stamp regulations alone. Furthermore, the food stamp benefits received by AFDC households

would have changed as they responded to the new AFDC work disincentives because both earnings and AFDC are counted against food stamp benefits. A more detailed analysis of employed AFDC recipients' labor supply decisions before and after OBRA revealed that their earnings and food stamp benefits could have increased if they were able and willing to leave AFDC entirely. On the other hand, the much greater disincentive to work while on AFDC could also have led recipients to stop working and to limit their post-OBRA losses with increased food stamp participation.

Because there were two distinct OBRA phases, data for each phase were used to evaluate how the food stamp changes affected the food stamp program first alone, and then in combination with the AFDC changes. Monthly caseload statistics from the Wisconsin Department of Health and Social Services provided a perspective before and after each of the two OBRA phases. After the food stamp changes became effective in Fall 1981 the percentage of AFDC cases with food stamps dropped three points and the average food stamp benefit was reduced by less than two percent. After the AFDC changes (in Winter 1982) the percentage of AFDC cases with food stamps rose by 25 points, and average food stamp benefits increased by 14 percent. Although these differences between the two phases of OBRA are in part the result of the contemporaneous recession, they also suggest that the food stamp cost savings expected from OBRA Phase I were offset to some extent by the later AFDC changes. Perhaps most telling in this regard is the fact that the percentage of food stamp

households with earners actually rose during Winter 1982, despite a rising state unemployment rate.

Further study of OBRA impacts took advantage of the availability of data from Basic Needs Survey monthly interviews that were conducted for a representative sample of Wisconsin households during the Summer, Fall, and Winter of 1981-82. The immediate impacts of the food stamp changes alone were evaluated first by comparing the AFDC and food stamp reciprocity and food stamp eligibility of BNS sample households between Summer and Fall 1981. For this purpose the food stamp eligibility of Fall 1981 households was simulated under the new OBRA income limit to determine the effect of OBRA in the absence of any other changes affecting eligibility between Summer and Fall. The rising unemployment rate and other factors generated actual Fall 1981 reciprocity and eligibility characteristics. According to the simulation, 3.2 percent of all households lost food stamp eligibility because of OBRA, however, only 2.1 percent of Fall 1981 Wisconsin households were actually ineligible. In other words, the recession and other changes reduced the decline in the food stamp caseload by about one third of what would have occurred under OBRA Phase I alone.

Another type of BNS comparison, of turnover in reciprocity-eligibility status, was conducted to determine the extent to which the second phase of OBRA was associated with differences in the sources of the food stamp caseload before and after the AFDC changes increased the food stamp participation incentive. This comparison substantiated the importance of the new incentive to get

food stamps. For example, during the Fall of 1981, none of the AFDC households eligible for but not receiving food stamps in the Summer became food stamp recipients. In Winter 1982 about one quarter of the Fall 1981 "AFDC only" food stamp ineligibles received food stamps. About one eighth of the Fall "AFDC only" food stamp eligibles also received food stamps in Winter. Finally, by weighting the difference in the Fall and Winter rates of flow into the food stamp caseload by the relative sizes of the original groups it was estimated that about 46 percent of the 13,000 household Winter 1982 food stamp caseload increase was attributable to either increased persistence by, or entrance from, AFDC households.

Taken together these findings establish for Wisconsin that the cost savings effects of the OBRA food stamp restrictions were substantially limited by responses to the AFDC work disincentives as well as by the recession. For generalizing this insight it is important to recognize that Wisconsin had a relatively low participation rate in the food stamp program among AFDC recipients before OBRA.

Figure 1: Pre- and Post-OBRA Income Opportunities for AFDC Eligibles

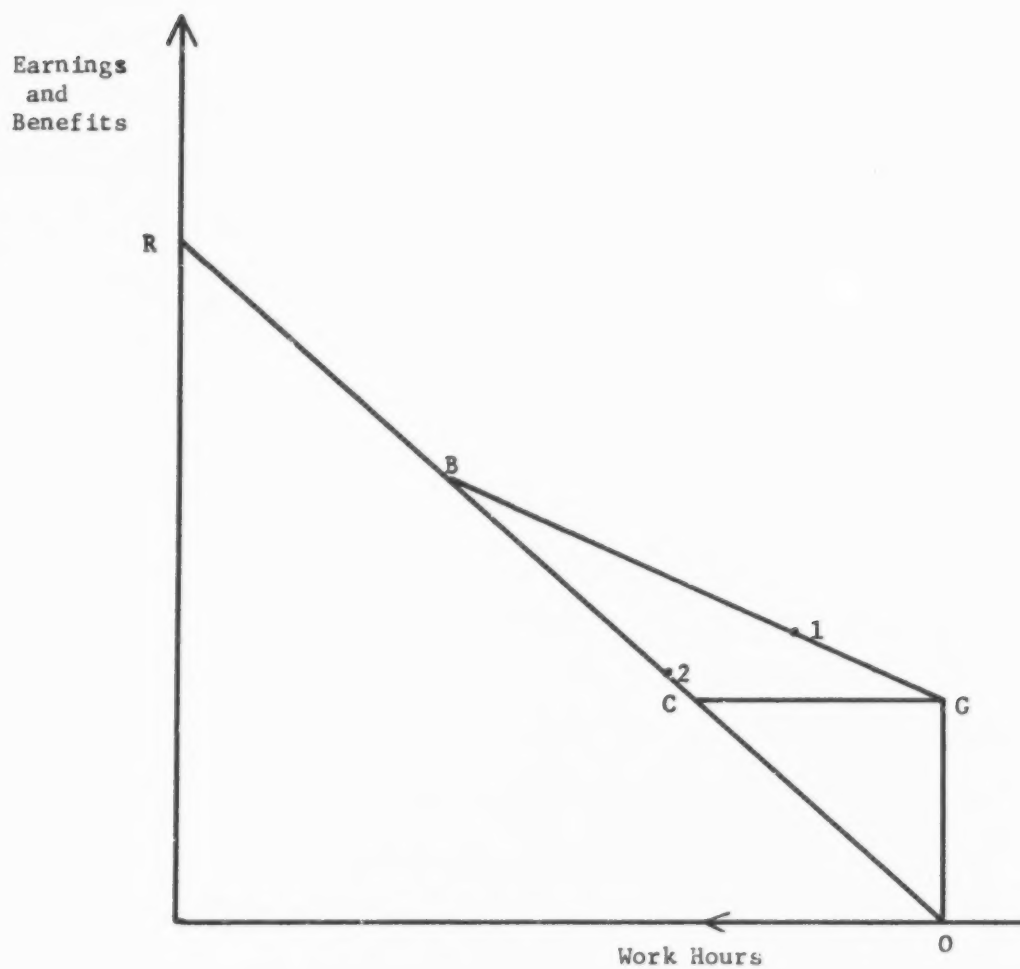
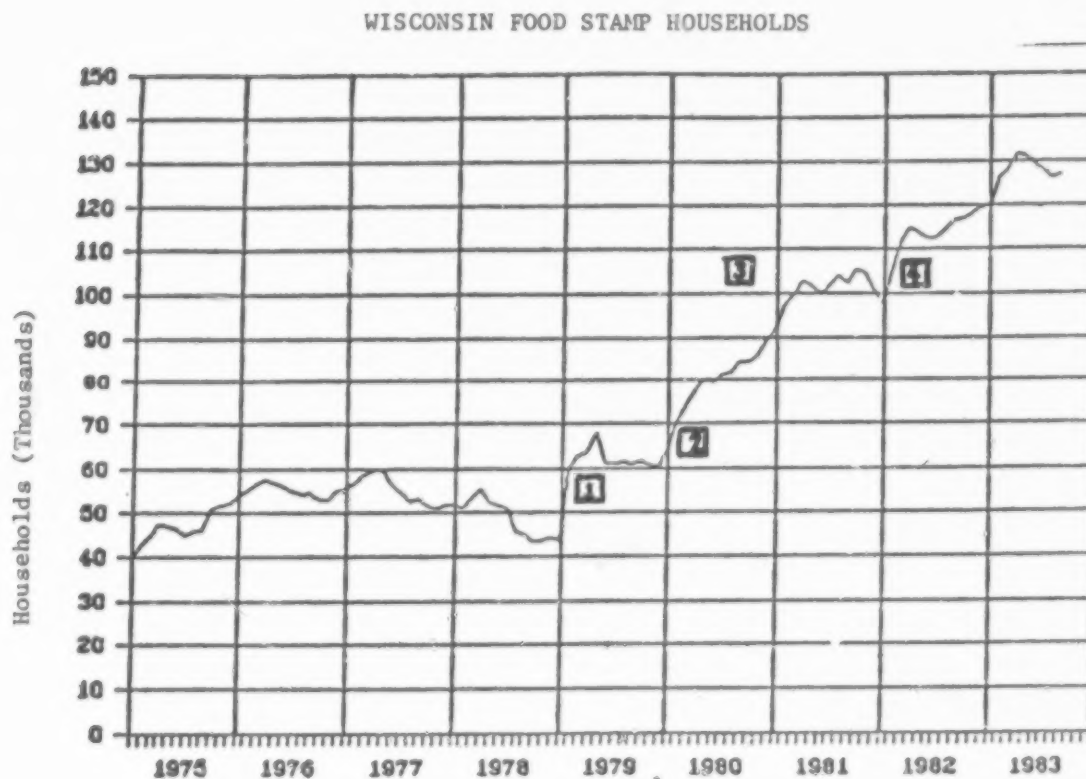


Figure 2: Food Stamp and AFDC Program Caseload Trends and Fluctuations for Wisconsin Since 1975



- 1 Purchase requirement for food stamps eliminated.
- 2 Eligibility for Low Income Energy dependent upon Food Stamp eligibility.
- 3 All counties added to the integrated computerized eligibility determination system.
- 4 OBRA closings.

Figure 3: Food Stamp and AFDC Program Caseload Trends and Fluctuations for Wisconsin Since 1975

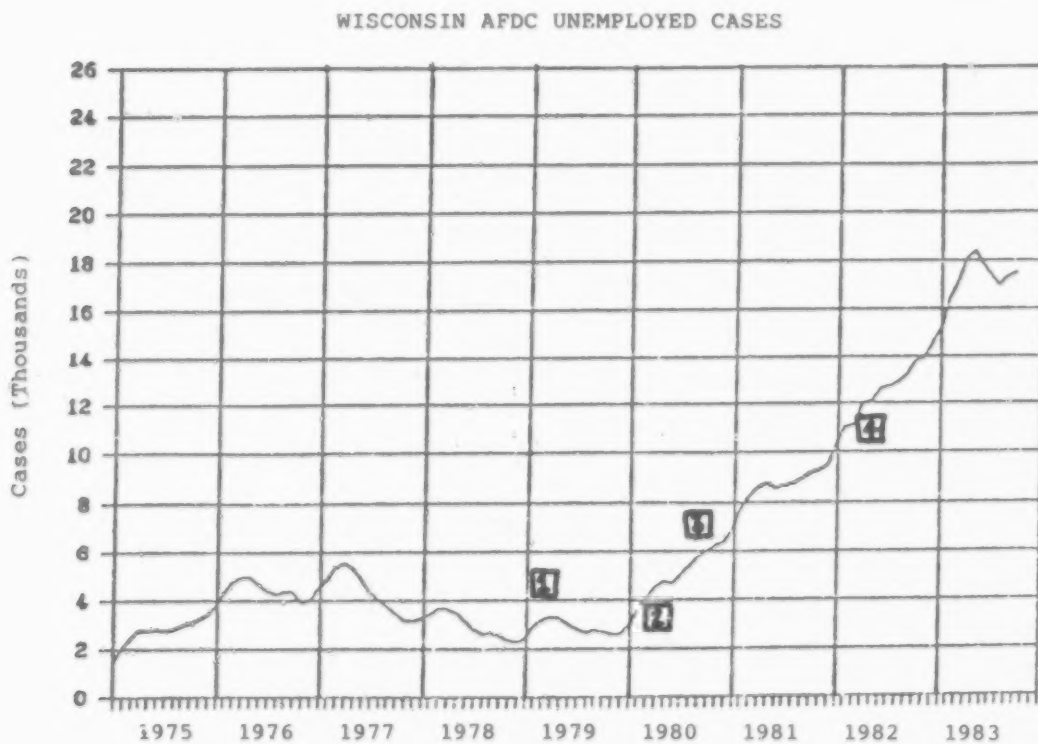
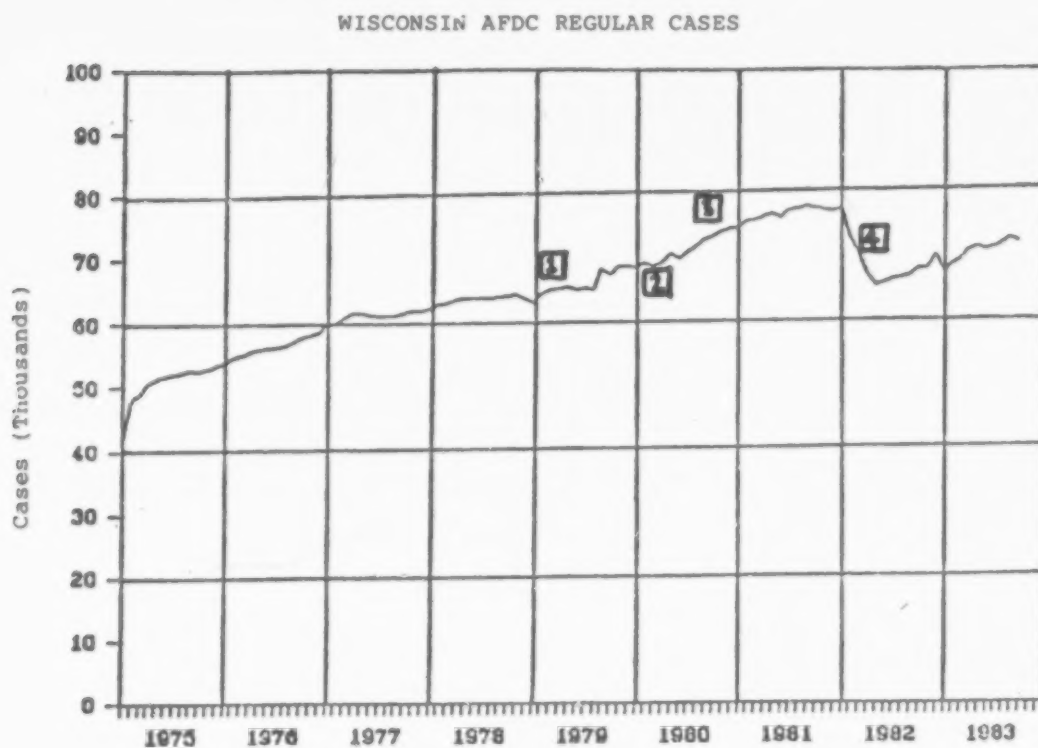


Figure 4: Percent Increase or Decrease in AFDC and FS Payments and Caseload, Summer to Fall 1981 and Fall 1981 to Winter 1982

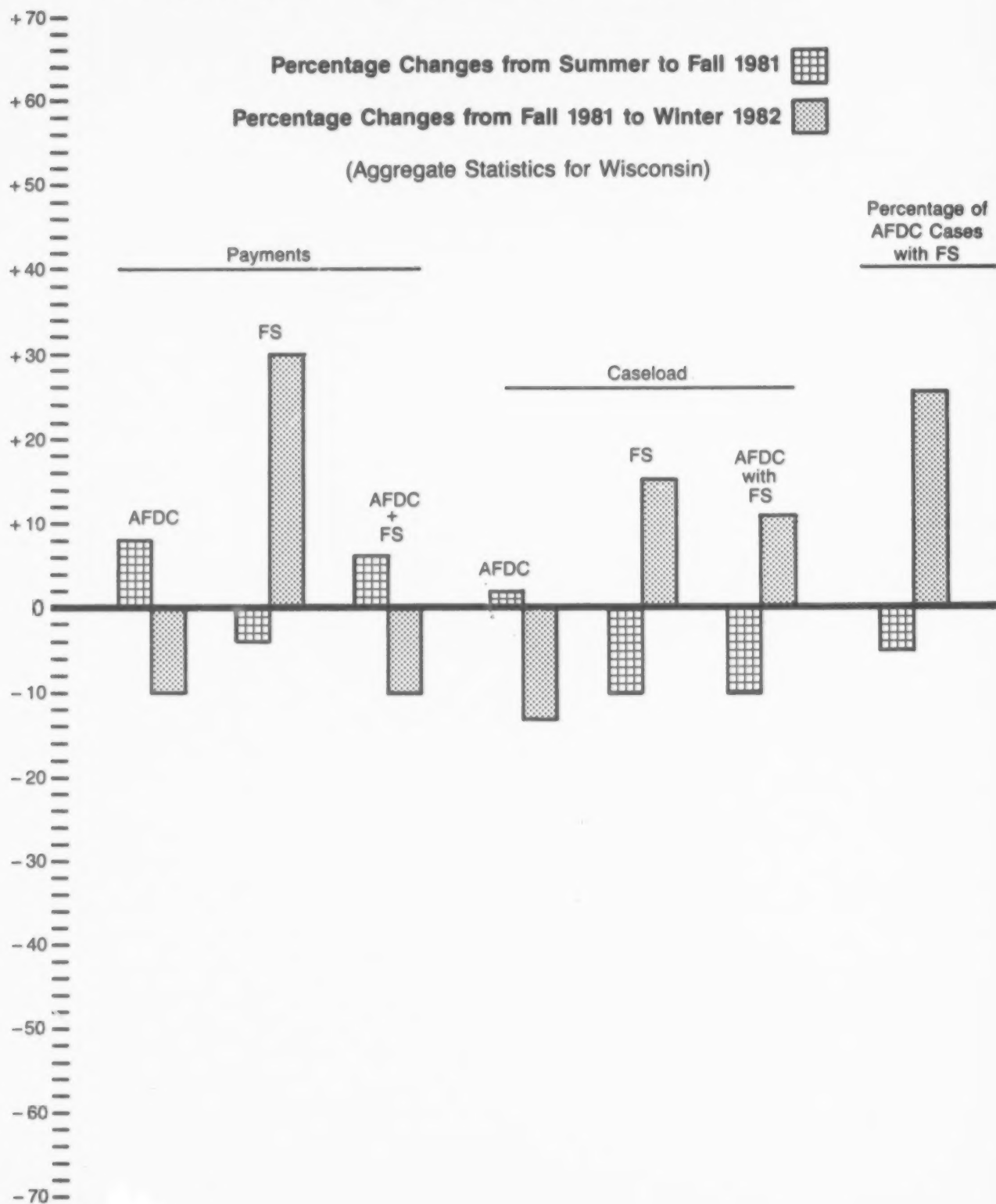


Figure 5: Percent Increase or Decrease in Unemployment Rates, Earnings, and Benefits, Summer to Fall 1981 and Fall 1981 to Winter 1982

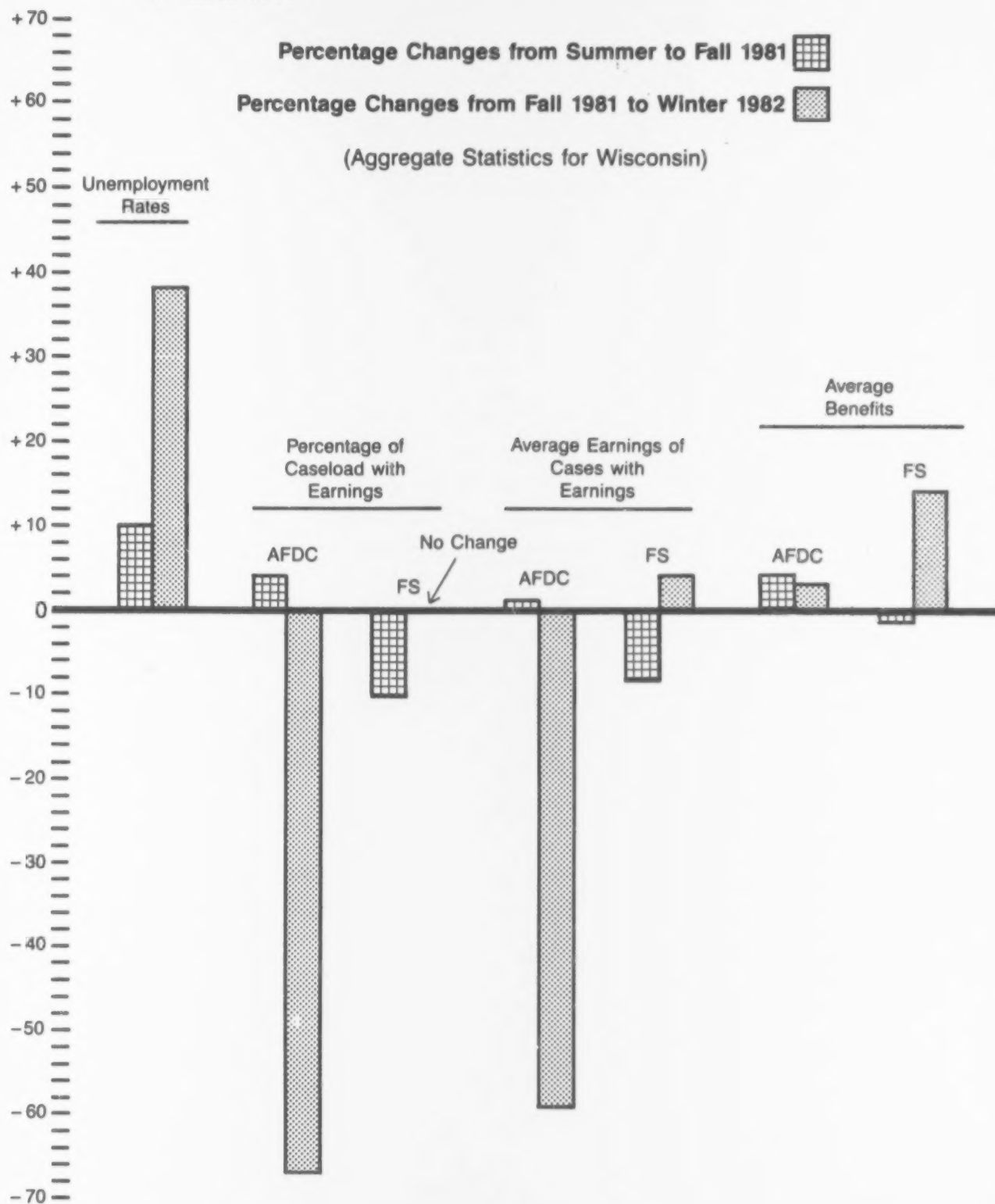
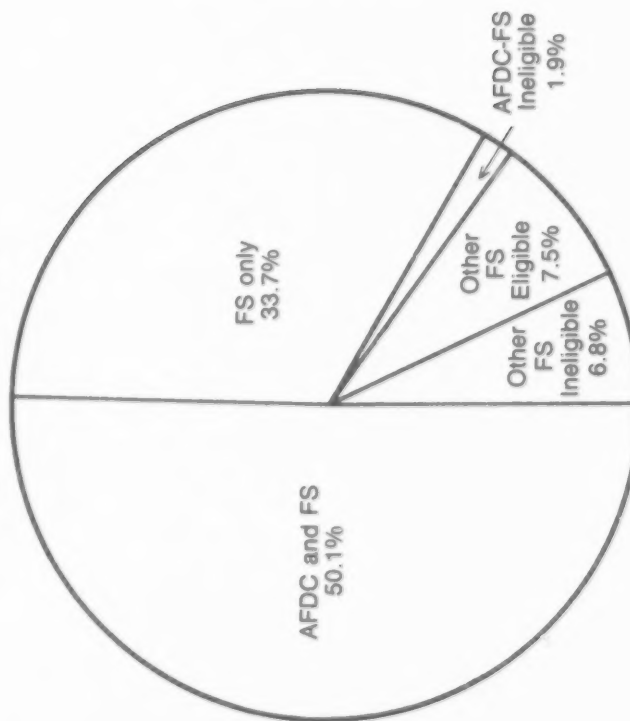


Figure 6: Source of Flow into Wisconsin Food Stamp Caseload, Summer to Fall 1981 and Fall 1981 to Winter 1982

Source of Flow into Fall 1981
Wisconsin Food Stamp Caseload
(from Summer 1981)



Source of Flow into Winter 1982
Wisconsin Food Stamp Caseload
(from Fall 1981)

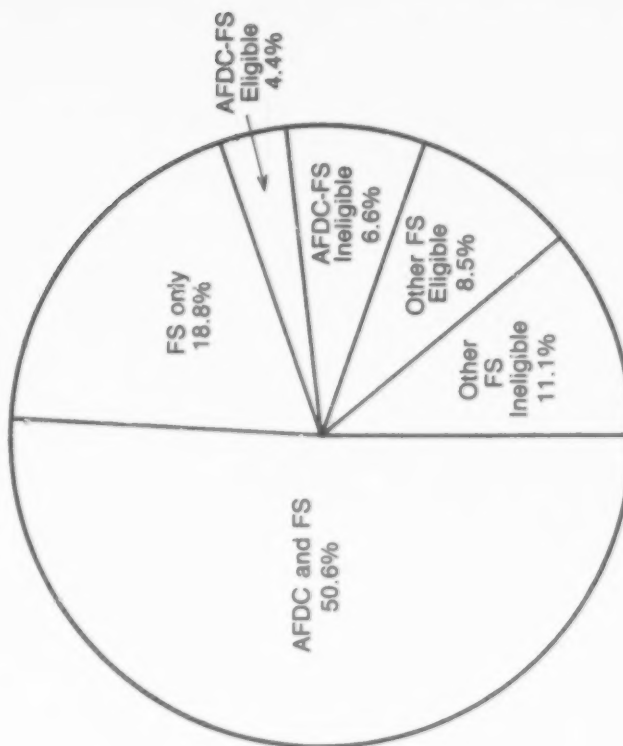


Table 1: Basic Needs Survey Interview Panels and Monthly Reference Periods

	Summer	Fall	Winter
<u>Interview Panel</u>	<u>Monthly Interview</u>	<u>Monthly Interview</u>	<u>Monthly Interview</u>
I	May, 1981	September, 1981	January, 1982
II	June, 1981	October, 1981	February, 1982
III	July, 1981	November, 1981	March, 1982
IV	August, 1981	December, 1981	April, 1982

Note: In Wisconsin, the new OBRA Food Stamp regulations were implemented beginning in October, 1981 and the new AFDC regulations were implemented beginning in January, 1982.

Table 2: Wisconsin Basic Needs Interviews Cumulative Response Rates and Reference Periods

Sample and Number Selected		First, Personal (1980)	Summer 1981, Monthly	Fall 1981, Monthly	Winter 1982, Monthly
Cross Section	1220	72%	63%	60%	56%
AFDC	330	43%	36%	33%	31%
Female Head	226	73%	65%	63%	58%
Aged Head	485	63%	52%	48%	43%
Low Income	457	72%	63%	59%	56%
Total	2718	67%	58%	54%	49%

Table 3: Summer 1981, Fall 1981, and Winter 1982 Wisconsin Unemployment Rate and Food Stamp and AFDC Statistics

	3-month Averages, Summer 1981 ¹	3-month Averages, Fall 1981 ²	3-month Averages, Winter 1982 ³
<u>Payments (\$M)</u>			
AFDC	30.7	33.1	30.2
FS	7.3	7.0	9.1
AFDC + FS	38.0	40.1	39.3
<u>Caseload (in 000's)</u>			
AFDC	81.6	83.5	73.6
FS	92.8	89.6	102.6
FS with AFDC	55.2	53.9	59.6
<u>% of AFDC Cases with FS</u>	67.6%	64.6%	80.9%
<u>% of Caseload with Earnings</u>			
AFDC	24%	25%	15%
FS	21	19	19
<u>Average Earnings (cases with earnings)</u>			
AFDC	513	516	310
FS	398	367	383
<u>Average Benefits</u>			
\$ AFDC/month	376	392	402
\$ FS/month	79	78	89
<u>Wisconsin Unemployment Rate⁵</u>	7.2	7.9	10.9

(notes continue)

Table 3 (continued): Summer 1981, Fall 1981, and Winter 1982
Wisconsin Unemployment Rate and Food Stamp and
AFDC Statistics

Sources: Food Stamp and AFDC Statistics from Wisconsin Department of Health and Social Services Computer Reporting Network, end of month statistics; unemployment rates from Wisconsin Department of Industry, Labor, and Human Relations.

¹Summer 1981--averages of monthly data for June, July, and August 1981

²Fall 1981--averages of monthly data for October, November, and December 1981.

³Winter 1982--averages of monthly data for February, March, and April 1982.

⁴FS with AFDC--cases receiving both food stamps and AFDC.

⁵Seasonally unadjusted unemployment rates.

Table 4: Summer 1981, Fall 1981, and Winter 1982 Wisconsin Basic Needs Survey
Household Characteristics (Three Month Averages)

	Summer 1981 (n = 1187)	Fall 1981 (n = 1123)	Winter 1982 (n = 1041)
<u>Food Stamp Benefits</u>			
None	95.4%	95.5%	94.3%
\$1-49	0.9	1.3	0.9
50-79	1.5	1.2	1.6
80-109	0.8	1.1	1.3
110-139	0.6	0.7	0.8
140 or more	0.7	0.3	1.2
Average for FS Recipients	\$88	\$78	\$102
<u>AFDC Benefits</u>			
None	95.3%	95.1%	95.6%
\$1-199	0.5	0.5	0.5
200-299	0.7	0.6	0.4
300-399	1.3	0.8	0.4
400-499	1.1	1.9	1.5
500 or more	1.2	1.2	1.3
Average for AFDC Recipients	\$386	\$400	\$409
<u>Respondents' Earnings</u>			
None	35.9%	36.6%	40.1%
\$1-499	10.6	11.4	9.6
500-799	14.8	13.5	12.9
800-1099	16.1	14.5	14.8
1100-1799	17.9	18.1	18.2
1800 or more	4.6	5.9	4.4
Average for Earners	\$976	\$1004	\$987

continued

Table 4 (continued): Summer 1981, Fall 1981, and Winter 1982 Wisconsin
Basic Needs Survey Household Characteristics
(Three Month Averages)

	Summer 1981	Fall 1981	Winter 1982
<u>Household Earnings</u>			
None	29.2	30.1	32.5
\$1-499	8.4	9.8	8.4
500-799	12.4	9.0	9.2
800-1099	14.2	11.5	12.8
1100-1799	21.5	22.4	22.1
1800 or more	14.3	17.3	15.1
Average for Households with Earnings	\$1244	\$1317	\$1266
<u>Household Gross Income</u>			
None	1.8	1.9	2.5
\$1-499	10.6	10.5	11.0
500-999	26.8	26.1	24.3
1000-1499	26.8	23.4	23.5
1500-1999	15.3	16.6	19.9
2000 or more	18.6	21.6	18.7
Average for All Households	\$1427	\$1539	\$1433

Table 5: Summer 1981, and Simulated and Actual Fall 1981 Wisconsin Household
Reciprocity/Eligibility Distributions

	Summer 1981 (n = 1187)	OBRA Simulation Fall 1981 (n = 1187)	Actual Fall 1981 (n = 1123)
Food Stamps Only	1.5%	1.0%	1.2%
Food Stamps and AFDC	3.2	2.6	3.1
AFDC Food Stamp Eligible	0.3	0.1	0.3
AFDC Food Stamp Ineligible	1.0	1.2	1.2
Other Food Stamp Eligible	9.4	6.4	7.3
Other Food Stamp Ineligible	<u>84.6</u>	<u>88.7</u>	<u>86.9</u>
	100.0%	100.0%	100.0%

Table 6: Fall 1981 and Winter 1982 Wisconsin Household
Reciprocity/Eligibility Distributions

	Fall 1981 (n = 1123)	Winter 1982 (n = 1067)
Food Stamps Only	1.2%	2.0%
Food Stamps and AFDC	3.1	3.6
AFDC, Food Stamp Eligible	0.3	0.1
AFDC, Food Stamp Ineligible	1.2	0.2
Other Food Stamp Eligible	7.3	8.8
Other Food Stamp Ineligible	<u>86.9</u>	<u>85.3</u>
	100.0%	100.0%

Table 7: Summer 1981 to Fall 1981 Reciprocity/Eligibility Turnover (unweighted Summer 1981 subsample counts; weighted sample percentages)

	Summer 1981					
	Food Stamps Only (n=24)	Food Stamps and AFDC (n=106)	AFDC, Food Stamp Eligible (n=10)	AFDC, Food Stamp Ineligible (n=32)	Other Food Stamp Eligible (n=117)	Other Food Stamp Ineligible (n=790)
Fall 1981						
Food Stamps Only	53.4%	1.2%	0.0%	0.0%	1.0%	0.3%
Food Stamps and AFDC	27.4	80.5	0.0	9.8	1.0	0.0
AFDC, Food Stamp Eligible	0.0	4.2	21.1	7.7	0.3	0.1
AFDC, Food Stamp Ineligible	0.0	3.6	48.8	72.0	1.6	0.0
Other Food Stamp Eligible	5.4	7.9	30.1	3.1	39.1	3.7
Other Food Stamp Ineligible	13.8	2.6	0.0	7.4	57.0	95.9
	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%

Table 8: Fall 1981 to Winter 1982 Reciprocity/Eligibility Turnover (unweighted Fall 1981 subsample counts; weighted sample percentages)

Winter 1982	Fall 1981					
	Food Stamps Only (n=20)	Food Stamps and AFDC (n=92)	AFDC, Food Stamp Eligible (n=12)	AFDC, Food Stamp Ineligible (n=29)	Food Stamp Eligible (n=94)	Other Food Stamp Ineligible (n=769)
Food Stamps Only	76.5%	5.7%	23.3%	18.9%	5.5%	0.3%
Food Stamps and AFDC	3.7	89.9	53.6	12.0	0.0	0.4
AFDC, Food Stamp Eligible	0.0	0.6	0.0	7.2	0.0	0.1
AFDC, Food Stamp Ineligible	0.0	0.7	12.7	13.5	0.0	0.1
Other Food Stamp Eligible	10.6	1.7	0.0	14.8	58.4	3.1
Other Food Stamp Ineligible	<u>8.8</u>	<u>1.4</u>	<u>10.4</u>	<u>33.6</u>	<u>36.1</u>	<u>96.0</u>
	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%

Table 9: Percentage Point Changes in Transition Probabilities: Fall 1981 to Winter 1982 (OBRA Phase II), minus Summer 1981 to Fall 1981 (OBRA Phase I)

Later	Earlier				
	Food Stamps Only	Food Stamps and AFDC	AFDC, Food Stamp Eligible	AFDC, Food Stamp Ineligible	Other Food Stamp Ineligible
Food Stamps Only	+23.5	+4.5	+23.3	+18.9	+4.5
Food Stamps and AFDC	-23.7	+9.4	+53.6	+2.2	-1.0
AFDC, Food Stamp Eligible	0.0	-3.6	-21.1	-0.5	+0.4
AFDC, Food Stamp Ineligible	0.0	-2.9	-36.1	-58.5	-0.3
Other Food Stamp Eligible	+5.2	-6.2	-30.1	+11.7	-1.6
Other Food Stamp Ineligible	-5.0	-1.2	+10.4	+26.2	+19.3
					-0.6
					+0.1

WISCONSIN'S WELFARE POPULATION: A LONGITUDINAL STUDY

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Introduction

We would like to begin by placing this paper in the context of the proceedings as a whole. Unlike other papers presented here, our analysis deals exclusively with welfare recipients, rather than individuals in poverty. Of course, many of the individuals receiving welfare are below or near the poverty level, however, not all individuals in poverty are receiving welfare. One might therefore view the welfare population as a subset of the overall poverty population. Keeping this in mind, the paper is divided into two sections: (1) a discussion of the data base that was used to draw our sample of welfare recipients; and, (2) the results and findings from our analysis. The findings presented in this paper are preliminary and meant to illustrate the potential of forthcoming research utilizing this data base. Until very recently there has been a lack of longitudinal analyses regarding the welfare population. A number of important policy oriented questions can only be addressed with longitudinal data, a point which will be touched upon throughout this paper.

The Data Base and Sample Selection

As documented by Laura Guy (1982), in the early 1970's it was generally recognized that the State's administration of the Aid to Families with Dependent Children (AFDC), Food Stamp, and Medicaid programs was problematic. Among the problems identified were errors in eligibility and unequal treatment and benefits for clients. In 1971 the Department of Health and Social Services initiated a project designed to produce a computer-based information system in order to effectively handle these problems. By October 1974, it was decided that an in-house effort at creating such a system would be attempted. This system became known as the Computer Reporting Network, or CRN. In 1976 a pilot implementation of the CRN system began in Kenosha and Wood counties. The pilot project was considered a success, and by late 1978 a decision was made to implement the CRN system statewide with data processing occurring in the counties and a data base system located in Madison. As of October 1980, more than 99 percent of all AFDC, Food Stamps, and Medicaid recipients in the State's 72 counties had been entered onto the CRN system.

Applicants for AFDC, Food Stamps, and/or Medicaid are required to fill out a combined application form. Their responses to these questions are collected and reviewed by the county case worker. A number of questions are asked on the application form, particularly economic and demographic questions (e.g., what is your income, assets, age, number of children). This information is then coded into machine readable form and keyed directly into a terminal from

the county office into the CRN system. Within minutes a case determination sheet is printed back to the county office indicating that individual's eligibility and benefits. Aside from inputting new applications, workers at the county level may also make changes to case records already active in the data base. For example, completed reviews of each case are required at set intervals, and items that have changed will be reentered into the CRN system.

The unit of analysis in the data base is the CRN case, which consists of the applicant, or case head, and those individuals listed on the application who are residing in the household of the case head. In certain circumstances it may also include family members not living at home. The CRN case may consist of a case head only, a case head and spouse, a three generation family, or various other household combinations. The CRN system therefore provides an excellent opportunity to examine the dynamics of Wisconsin's welfare population over time.

A two percent random sample was drawn of all cases that were eligible as of September 30, 1980 for one or more of the three welfare programs. The total number of eligible cases on the CRN system in September 1980 was approximately 140,000, resulting in a sample size of 2,796 households. These households were then followed for 37 months, through September 1983. All of the analytical files have been stripped of personal identification information (e.g., name, Social Security number, address, telephone).

For the analysis presented in this paper, four months of information, covering a year and a half, were linked together:

September 1980, March 1981, September 1981, and March 1982. If an individual loses his or her welfare eligibility, only then to regain it, that movement is picked up in the sample. The ability to link these months together permits a longitudinal examination of Wisconsin's welfare population, as opposed to cross-sectional, which has been the principle type of analysis carried out on the welfare population. The difference between the two approaches has an analogy in photography. Cross-sectional studies provide snapshots of the welfare population. Such views permit a study of the persons on the system at the particular moments the snapshots were taken. Longitudinal studies, on the other hand, are like moving pictures, or films, that enable one to follow an entire group (or particular individuals from that group) over time. Our goal was to follow the September 1980 sample in order to begin answering questions of the following sort: What percentage of households exit from welfare after several years? Can we predict who is more likely to leave the welfare system and who is more likely to remain? Why do households leave welfare? With these and other questions in mind, the analysis of the data set is presented.

Analysis and Tables

Before discussing the analysis, it should be noted that the welfare population is by no means a homogeneous population, but rather contains numerous demographic groups. Within the sample there are various household and family structures, and various programs and program combinations in which a household could

participate. For this reason, we have decided to divide the sample into four major household classifications: (1) female heads of household with children (no spouse present), (2) married couples, (3) single heads of household (no children or spouse present), and (4) elderly household heads (over age 65). One household category has been eliminated by this classification - male heads of household with children (no spouse present). Out of the total sample of 2,796 cases, only 22 cases fit this description. This category has therefore been dropped from the remaining analysis.

In Table 1, the distribution of program type by household type is found. By dividing the sample according to household structure, it is apparent that this population has also been divided by program type. Consequently, 94.5 percent of female heads are receiving AFDC, 91.4 percent of single heads are receiving only Food Stamps and/or Medicaid, while 88 percent of the elderly are participating solely in the Medicaid program. Only married couples are fairly evenly distributed across program type.

For each of these household groups, we asked several basic questions. First, how long had our sample households been on welfare prior to September 1980, and at what age did they enter the welfare system? Second, what were the demographic and socioeconomic characteristics of the sample in September 1980? Third, what percentage of the sample exited from welfare during the year-and-a-half period under observation? Fourth, how do those who have exited differ from those who have remained? Finally, what were the reasons for leaving welfare? These questions might be put another way.

Where had these households been prior to September 1980? Where were they in September 1980? Where did they go after September 1980? The question of where they had been is addressed in Table 2.

Prior Welfare History

The top panel of Table 2 illustrates prior length of the current welfare spell by household type. Female heads and the elderly tend to be on for longer spells. In both cases, however, close to 50 percent have been participating in the AFDC, Food Stamps, and/or Medicaid programs for less than one year. Married couples and single heads have the shortest prior length of welfare use. Married couples average only 1.5 years, with a median of .5 years, while single heads average .9 years, with a median of .3 years.

It is clear that most households have not been receiving welfare for an extended period of time prior to September 1980. Over 50 percent of the total sample have been on welfare for less than one year, while only 19.4 percent have been receiving AFDC, Food Stamps, and/or Medicaid for more than three years.

Age at entry into the current welfare spell is shown in the bottom panel of Table 2. The majority of female heads entered their current welfare spell in their late teens or 20s. Married heads were slightly older when entering welfare, averaging 31.3 years. Close to 50 percent of single heads entered during their late teens or early 20s, however, the average age of entry is higher (31.3) due to the wide distribution of older ages. The mean age at entry for elderly case heads is approximately 80 years old.

Base Month Characteristics of the Welfare Population

Turning to Tables 3, 4, and 5 we ask the question, what were the demographic and socioeconomic characteristics of the sample in September 1980? Several demographic characteristics are presented in Table 3. Looking first at region, approximately one third of the total sample resided in Milwaukee county, another third in other metropolitan counties, and a final third in nonmetropolitan counties. Female heads, however, were more likely to reside in Milwaukee county, while married couples tended to live in other metropolitan or nonmetropolitan counties. Single and elderly heads were fairly evenly distributed across geographic regions.

Females comprise 85.1 percent of married case heads. County welfare offices prefer that a wife be listed as the case head. If a couple separates or divorces, children are more likely to remain with the woman, and therefore a new application is not necessary. Single heads are approximately equally divided between the sexes, but 70 percent of elderly heads are female.

In all household categories the majority of case heads are white, however, the racial composition differs according to household type. While approximately 60 percent of female and 70 percent of single heads are white, over 80 percent of married and elderly heads are white.

There are clear differences in incapacitation status across household categories. The State defines incapacitation as the inability to perform typical work, whether the condition be temporary or permanent, physical or mental. Only 2.9 percent of

female heads are considered incapacitated. The percentage for married heads is slightly larger, with 6.1 percent being incapacitated. On the other hand, approximately one out of three single heads, and three out of five elderly heads are incapacitated. The difference in incapacitation status across households reflects the differences in program participation. Most elderly case heads are participating in the Medicaid program because of incapacitation.

Finally, most female heads have either one or two children, while married heads have a slightly higher number of offspring. The idea of large, extended families being on welfare is simply not supported by this finding. Nationally, the average number of children for families with offspring in 1980 was 1.89, while the average for female-headed families with offspring was 1.87 (U.S. Bureau of the Census, 1981), both of which are similar to the mean number of children estimated here (2.0) for female-headed families on welfare.

In Table 4 we can see that female heads tend to be in their 20s and early 30s. Married heads are slightly older. About 50 percent of single heads are between the ages of 15 and 24. The remaining singles are fairly evenly distributed up to age 65. Finally, the average age of elderly heads of household in September 1980 was 81.8, with a sizeable percentage (37.8) being age 85 or over.

Table 5 contains levels of education, employment, and income for household heads. With the exception of the elderly, household heads (as well as married spouses) tend to have either nine to eleven years of schooling, or to have graduated from high school. Average

number of years of education is approximately eleven. The elderly have much lower levels of education, which is partially a result of cohort differences in educational attainment.

In all household categories, the majority of household heads are not working. The percentage varies from 72.5 percent for female heads, to 99.5 percent for elderly heads. Average hours worked per week, and average hours worked per week for those employed are also shown. Female heads tend to be working the most hours, followed by married heads, singles, and the elderly. As Sanger notes, however, cross-sectional data tend "to underestimate grossly the importance of work to large segments of the welfare population; while at one point in time the percentage of recipients who are working might be quite low, data based upon tracking recipients over an extended period have revealed a consistently more active relationship with the labor market than could be inferred from data collected at any one point in time" (1979:18). The work of Rein and Rainwater (1978) and AuClaire (1979) supports this observation. Although our sample in September 1980 indicates that a minority of welfare case heads are employed, if followed over the course of a year, a much larger percentage would undoubtedly have worked some amount of time.

The bottom panel of Table 5 illustrates monthly income generated by household heads. The patterns for income are similar to those for employment. Most households are not earning any income. Again, the effect of cross-sectional data on employment status is applicable to income. Female and married heads have the highest levels of monthly income, while single and elderly heads have the

lowest. Average hourly wage rate also differs among household categories. The wage rate for female heads (\$3.83) is nearly a dollar greater than that for single heads (\$2.82).

Exiting From Welfare

Having looked at some of the characteristics of Wisconsin's welfare population in the initial month of observation, we wanted to ask what percentage of the sample had exited from welfare during the year-and-a-half period under observation? Table 6 illustrates the cumulative completed spell distribution and exit probabilities for various household types. It is important to remember that the sample drawn in the initial month of September 1980 was a cross-section of welfare users, rather than new cases. As found in Table 2, these households had been on welfare for varying lengths of time prior to September 1980.

Looking first at female heads, 12.4 percent had completed their original welfare spell six months after being sampled. After twelve months, 22.3 percent had exited, and at the end of 18 months, 35.4 percent, or one out of three female heads, had completed her original spell. Among female heads, 5.9 percent have returned to welfare having exited at some point, leaving 29.5 percent who have exited and not returned during the year-and-a-half period.

Married heads and single heads show much higher proportions of cumulative exits. After 18 months, 61.6 percent of married heads and 67.7 percent of single heads have completed their original welfare spell. A higher percentage of married and single heads also return to welfare.

The elderly resemble female-headed households in terms of their cumulative completed spell distribution, however, they are much less likely to return to welfare than female, married, or single heads. Only 2.1 percent of elderly heads will eventually return to welfare. The reason will be discussed later.

The bottom panel of Table 6 shows the exit probabilities by type of household. These probabilities refer to the likelihood of exiting at time three, for example, given that a case was on at time two. The time period of September 1981 to March 1982 witnessed an increase in the likelihood of female and married heads exiting from welfare. This increase may be attributable to the Reagan budget cuts which went into effect during this period. The cuts primarily affected the AFDC program, hence the increase in exits for female and married heads. For single heads there is a general downward trend in the likelihood of exiting from welfare over time, while the probability of exiting for elderly heads remained consistent over the 18 month period.

Next, we ask what differentiates those who are no longer receiving welfare from those still on as of March 1982. In Table 7 it is clear that those still receiving welfare had been on a longer amount of time prior to September 1980 than those who have exited. This pattern holds for all household types.

Table 8 provides a comparison of demographic characteristics. A greater percentage of female heads no longer on welfare lived outside of Milwaukee county, were white, and had only one child. Married heads who exited also tended to have fewer children and to

be white. For single heads, more of those exiting were males and were not incapacitated.

In Table 9, the age of case heads is shown. Only for single heads is there a clear difference between those off and those on the system. Single heads who have exited tend to be younger than those who have remained.

Finally, the socioeconomic characteristics of households is shown in Table 10. In general, those who have exited tend to have greater education, higher levels of employment, and a higher wage rate than those remaining on welfare.

Having examined the patterns of welfare exits, the question is raised: Why do families leave public assistance? For each program, the CRN system generates reasons for terminating a case's eligibility. These reasons can differ depending upon the program. For example, a family may have refused additional support from Food Stamps, while their AFDC eligibility was terminated because of high income or assets. It is therefore necessary to separate, by program, reasons for exiting welfare. The reasons are generated from changes that occur within case households. The CRN system monitors these changes, entering a reason for ineligibility where appropriate. These reasons have been collapsed and are presented in Table 11.

As found in Table 1, most of the sampled female-headed families are participating in the AFDC program. Nearly one quarter of such households exited from AFDC because their income and/or assets were above the eligibility limits. Another 17.7 percent exited because

they failed to provide sufficient information to determine continued eligibility. It is impossible to establish why these households did not provide adequate information. They may be attempting to conceal a change in household structure, they may no longer be interested in receiving welfare, or various other circumstances may be occurring. Eight percent of female-headed families have exited from AFDC because of a change in household structure (in this case, because there is no longer a child under age 18 in the family). Finally, 50 percent leave for other reasons (e.g., refused additional support, case has moved, change in federal/state laws, and work requirements not met). The patterns of exiting from Food Stamps and Medicaid for female heads are similar. The major reasons for exiting are changes in income/asset level, and a failure to supply information.

Married heads are participating in various combinations of AFDC, Food Stamps, and Medicaid. In all three programs, the main reasons for leaving welfare are a change in income or assets, and a failure to provide sufficient information for continued eligibility.

Almost all single heads are participating in either the Food Stamp or Medicaid programs. The majority of those leaving Food Stamps have failed to supply the proper information. For Medicaid participants, the lack of information is also an important reason for exiting.

Turning to the elderly, most are Medicaid recipients (88 percent are receiving only Medicaid, as found in Table 1). The primary reason for leaving this program is due to a household change, which in this case is death. Thus, 75 percent of elderly heads were no

longer receiving Medicaid because they died. This explains why so few elderly heads return to welfare.

Conclusion

Welfare recipients are not a homogeneous population. Four distinct subgroups were analyzed: female heads of household, married couples, singles, and the elderly. Approximately 40 percent of the caseload is female-headed with children. Married couples, singles, and the elderly each constitute roughly 20 percent of the caseload.

Female-headed households are headed by a woman usually in her 20s or early 30s, with one or two children in the household. Over 90 percent of these families are participating in the AFDC program, with a 1.2 year median prior length of welfare use. Most have nine to eleven, or twelve years of schooling. Three out of four are not employed, and those who are working have an average hourly wage rate of \$3.83. The fact that most of these women are either never married or separated/divorced illustrates two avenues towards entering welfare. For a never-married woman, having a child to care for, lacking a second wage earner in the household, and being in a relatively noncompetitive position in the labor market, welfare becomes an economic necessity. On the other hand, a woman who has become separated or divorced had at one point established a family with her husband, only then to lose (in most instances) the primary wage earner. This, along with a lack of employment skills and lack of alimony and/or child support payments (see Sorenson and MacDonald, 1981) may have caused her to turn to welfare for

assistance. In both cases, the formation of a new family structure without socioeconomic resources is undoubtedly a primary reason for female heads to utilize AFDC. As Sanger writes, "when a woman with children becomes a family head, her chances of becoming poor and going on welfare greatly increase" (1979:51).

Eighteen months after the first sampling date, 35.4 percent of female heads have completed their original spell of welfare. Those exiting have a greater probability of living outside of Milwaukee county, having only one child, of being white, having higher levels of education, employment, and wages, and of having spent less time on welfare than those who have remained. The primary reason for female heads to exit welfare is either a change in their income/asset level, or a failure to provide sufficient information for continued eligibility.

Married couples can be characterized in a somewhat different fashion. First, they are participating in a range of programs, rather than only AFDC. They also have been on welfare for a shorter amount of time than female heads (.5 year median). Married heads tend to be in their 20s or 30s, and most have at least one or two children. The majority have nine to eleven, or twelve years of education. Average hourly wage is \$3.44. If the question is asked: Why have these couples had to resort to welfare? several answers are possible. While married couples generally have more resources at their command, they also have more expenses (due to larger family size). For many of these couples, a husband may be unemployed and unable or unwilling to find work. If one or both spouses are working, the income generated is barely enough to get

by. Some form of welfare is necessary, either in the form of cash, food stamps, and/or medical benefits. Welfare is probably a solution to a temporary economic crisis among married couples.

Indeed, a much higher percentage of married than female heads have exited from welfare during the 18 month period of observation. Approximately three out of five married couples will have left welfare during this time. Those leaving tend to have fewer children, higher levels of socioeconomic resources, and to be white. Most are exiting because of a change in income/assets or because they have not provided sufficient eligibility information.

Single-headed households represent a third major group of welfare recipients. Single heads tend to be receiving either Food Stamps or Medicaid, and their prior use of welfare is short (.3 year median). Slightly over one half are male, and approximately 50 percent are between the ages of 15 and 24 (with the remainder evenly distributed up to age 65). One third of single heads are incapacitated. Education averages 10.8 years, while 83.8 percent are not employed. Mean hourly wage is \$2.82. There would appear to be at least two separate reasons for this group's welfare use. First, one out of three single heads are incapacitated. Perhaps lacking a family or kin network for support, and lacking sufficient economic resources, these individuals turn to Medicaid in order to cover their medical needs. A second group of singles is using Food Stamps. In this case, young individuals living on their own and lacking employment, or well paying jobs, may be turning to the Food Stamp program to help cover monthly expenses.

Single heads are the most likely household category to have exited from welfare. Nearly 70 percent have left at some point during the year-and-a-half period. Single heads who were off welfare as of March 1982 had a greater likelihood of being male, not incapacitated, and younger than those remaining. They also have been on welfare a shorter amount of time and have higher levels of socioeconomic status. The main reason for their exit is the failure to provide sufficient information for continued eligibility.

The elderly represent a final group of welfare recipients. Close to 90 percent of elderly heads on the CRN system are participating in the Medicaid program. Average age is 81.8 years, 70 percent are female, and nearly 60 percent are incapacitated. These are individuals who are turning to welfare in order to meet their medical needs. Lacking a sufficient economic resource base to deal with failing health, they are forced to rely on the Medicaid program. Slightly over one out of three elderly heads have exited from welfare, usually due to death.

To conclude, although the analysis presented in this paper is preliminary, it indicates some of the potential of this data set. Over the course of the next several years we would anticipate that the Applied Population Laboratory, the Institute for Research on Poverty, and others, will generate information that will prove to be useful and illuminating in the future. We feel that it is critical that such work be carried out. For only when we as a State are well informed can intelligent and insightful policy be created.

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Table 1: Program Type By Household Type: September 1980

Program Type	Household Type				Total
	Female Heads with Children	Married Heads	Single Heads	Elderly Heads	
AFDC/FS/MA	64.6%	25.9%	4.6%	.5%	31.5%
AFDC/MA	29.9	33.5	4.0	.4	19.0
FS	1.7	14.7	39.1	3.2	11.9
FS/MA	2.8	18.9	11.6	8.0	8.7
MA	1.0	7.0	40.7	88.0	28.9
Total	100% (1098)	100% (525)	100% (550)	100% (601)	100% (2774)

Table 2: Welfare History Prior to September 1980 By Household Type

Welfare History	Household Type				Total
	Female Heads with Children	Married Heads	Single Heads	Elderly Heads	
<u>Prior Length of Welfare Use</u>					
Less than 1 year	45.8%	68.6%	80.8%	49.7%	57.8%
1-2 years	20.3	11.9	9.5	19.7	16.5
2-3 years	7.8	4.9	2.0	8.7	6.3
3 years or more	26.1	14.6	7.7	22.0	19.4
Total	100% (1093)	100% (512)	100% (547)	100% (600)	100% (2752)
Average Length in Years	2.5	1.5	.9	2.0	1.9
Median Length in Years	1.2	.5	.3	1.0	.8
<u>Age at onset of Current Welfare Cycle</u>					
Less than 15	.3%	0.0%	.4%	—	.2%
15-19	20.3	10.2	30.0	—	15.9
20-24	28.5	21.7	21.8	—	19.7
25-29	21.5	22.7	9.1	—	14.6
30-34	13.6	14.1	6.0	—	9.2
35-39	7.9	14.1	4.6	—	6.6
40-44	3.4	5.9	5.5	—	3.5
45-49	2.4	3.9	6.0	—	2.9
50-54	1.6	3.3	5.3	—	2.3
55-59	.6	2.3	7.1	—	2.1
60-64	—	2.0	4.2	2.8	1.8
65-69	—	—	—	12.5	2.7
70-74	—	—	—	15.3	3.3
75-79	—	—	—	18.3	4.0
80-84	—	—	—	22.7	4.9
85 or more	—	—	—	28.3	6.2
Total	100% (1093)	100% (512)	100% (547)	100% (600)	100% (2752)
Average Age	27.1	31.3	31.3	79.8	40.2
Median Age	25.1	28.7	24.3	80.2	29.8

Table 3: Demographic Characteristics By Household Type: September 1980

Demographic Characteristics of Case Heads	Household Type				Total
	Female Heads with Children	Married Heads	Single Heads	Elderly Heads	
<u>Region</u>					
Milwaukee	43.5%	17.7%	32.7%	25.3%	32.6%
Other Metropolitan	33.0	38.7	37.3	37.9	36.0
Nonmetropolitan	23.5	43.6	30.0	36.8	31.5
Total	100% (1098)	100% (525)	100% (550)	100% (601)	100% (2774)
<u>Sex</u>					
Female	100.0%	85.1%	48.9%	70.7%	80.7%
Male	0.0	14.9	51.1	29.3	19.3
Total	100% (1098)	100% (525)	100% (550)	100% (601)	100% (2774)
<u>Race</u>					
White	59.5%	81.5%	69.8%	84.2%	71.1%
Black	32.0	5.1	16.7	1.0	17.2
Other	8.6	13.3	13.5	14.8	11.8
Total	100% (1098)	100% (525)	100% (550)	100% (601)	100% (2774)
<u>Incapacitation</u>					
Not Incapacitated	97.1%	93.9%	66.8%	42.0%	78.9%
Incapacitated	2.9	6.1	33.2	58.0	21.1
Total	100% (1098)	100% (525)	100% (549)	100% (576)	100% (2748)
<u>Number of Children</u>					
0	—%	11.6%	100.0%	98.7%	43.7%
1	43.4	23.2	—	1.2	21.8
2	30.7	26.9	—	0.0	17.2
3	14.8	19.0	—	0.0	9.4
4 or more	11.1	19.2	—	.2	8.1
Total	100% (1098)	100% (525)	100% (550)	100% (601)	100% (2774)
Average	2.0	2.3	0.0	0.0	1.2

Table 4: Age By Household Type: September 1980

Age of Case Heads	Household Type				Total
	Female Heads with Children	Married Heads	Single Heads	Elderly Heads	
Less than 15	.2%	0.0%	.4%	-%	.1%
15-19	7.2	6.5	25.3	-	9.1
20-24	28.2	19.4	25.1	-	19.8
25-29	24.4	22.3	9.8	-	15.8
30-34	16.8	16.0	4.7	-	10.6
35-39	12.0	16.0	4.9	-	8.8
40-44	4.4	6.7	5.1	-	4.0
45-49	3.1	4.8	6.2	-	3.4
50-54	2.6	3.0	5.3	-	2.7
55-59	1.1	3.2	7.5	-	2.5
60-64	0.0	2.1	5.8	-	1.6
65-69	-	-	-	10.5	2.3
70-74	-	-	-	13.1	2.8
75-79	-	-	-	16.1	3.5
80-84	-	-	-	22.5	4.9
85 or more	-	-	-	37.8	8.2
Total	100% (1098)	100% (525)	100% (550)	100% (601)	100% (2774)
Average Age	29.6	32.7	32.1	81.8	42.0
Median Age	27.6	30.4	24.7	82.7	32.3

Table 5: Socioeconomic Characteristics By Household Type: September 1980

Socioeconomic Characteristics of Case Heads	Household Type				Total
	Female Heads with Children	Married Heads	Single Heads	Elderly Heads	
<u>Education</u>					
8 or less	5.4%	11.9%	13.0%	72.6%	17.8%
9-11	37.4	32.4	34.9	7.9	31.7
12	43.3	46.2	37.4	13.7	38.6
Greater than 12	13.9	9.5	14.7	5.8	12.0
Total	100% (1046)	100% (494)	100% (455)	100% (328)	100% (2323)
Average Education	11.3	11.0	10.8	7.9	10.7
<u>Employment</u>					
Not Employed	72.5%	86.1%	83.8%	99.5%	83.2%
Part-Time	11.3	6.3	13.3	.5	8.4
Full-Time	16.2	7.6	2.9	0.0	8.4
Total	100% (1098)	100% (525)	100% (550)	100% (601)	100% (2774)
Average Hours Worked per Week	9.2	4.5	3.8	0.0	5.2
Average Hours Worked per Week for Those Employed	32.7	32.4	23.6	7.7	30.9
<u>Monthly Income</u>					
\$0	73.1%	83.0%	82.0%	99.2%	82.4%
\$1-249	4.0	5.7	7.3	.7	7.2
\$250-499	7.8	4.8	9.5	.2	5.9
\$500 or more	15.0	6.5	1.3	0.0	7.5
Total	100% (1098)	100% (525)	100% (550)	100% (601)	100% (2774)
Average Monthly Income	\$138.27	\$73.02	\$45.77	-	\$78.13
Average Monthly Income For Earners	\$514.64	\$430.71	\$254.25	-	\$443.98
Average Wage Rate	\$3.83	\$3.44	\$2.82	-	\$3.57

Table 6: Cumulative Completed Spell Distribution and Exit Probabilities By Household Type

	Household Type				
	Female Heads with Children	Married Heads	Single Heads	Elderly Heads	Total
<u>Cumulative Completed Spell Distribution</u>					
Percent of cases completing original welfare spell at the end of ____ months					
6 months	12.4%	26.3%	40.4%	14.3%	21.1%
12 months	22.3	43.1	58.2	27.3	34.5
18 months	35.4	61.6	67.7	37.3	47.2
Percent of cases that have returned	5.9%	8.0%	9.1%	2.1%	6.1%
Percent of cases that have left and not returned	29.5%	53.6%	58.6%	35.2%	41.1%
 <u>Exit Probabilities</u>					
9/80 - 3/81	.12	.26	.40	.14	.21
3/81 - 9/81	.11	.23	.30	.15	.17
9/81 - 3/82	.18	.32	.25	.14	.20

Table 11: Reasons For Exiting AFDC, Food Stamps and Medicaid By Household Type

Reasons for Exiting	Household Type				Total
	Female Heads with Children	Married Heads	Single Heads	Elderly Heads	
Reasons for Exiting AFDC					
Income/Asset Change	23.6%	26.5%	0.0%	0.0%	23.9%
Household Change	8.3	16.8	58.3	50.0	12.7
Lack of Information	17.7	29.0	8.3	50.0	21.4
Other	50.3	27.7	33.3	0.0	42.0
Total	100% (288)	100% (155)	100% (12)	100% (2)	100% (457)
Reasons for Exiting Food Stamps					
Income/Asset Change	22.9%	35.1%	9.4%	20.6%	21.2%
Household Change	1.1	1.3	1.0	5.9	1.4
Lack of Information	33.5	36.4	60.6	35.3	44.0
Other	42.5	27.3	29.1	38.2	33.3
Total	100% (179)	100% (154)	100% (203)	100% (34)	100% (570)
Reasons for Exiting Medicaid					
Income/Asset Change	35.7%	34.6%	13.1%	11.4%	25.8%
Household Change	1.0	.9	2.9	75.6	17.6
Lack of Information	23.6	35.5	36.6	4.5	24.9
Other	39.8	29.0	47.4	8.5	31.7
Total	100% (314)	100% (231)	100% (175)	100% (201)	100% (921)

APPENDIX

POVERTY IN WISCONSIN

November 30, 1983
Madison, Wisconsin

Program

8:00 am Registration

8:30 U.S. and Wisconsin Poverty: Progress of the War
Sheldon H. Danziger, Institute for Research on Poverty

9:00 Poverty Among Minorities
Stephen J. Tordella, Applied Population Laboratory

9:30 Women and Poverty
Ann Nichols-Casebolt, Institute for Research on Poverty

10:00 Break

10:15 Elderly Poverty
Patricia A. Guhleman and Doris P. Slesinger, Applied
Population Laboratory

10:45 Rural Poverty
William E. Saupe and John W. Belknap, Department of
Agricultural Economics, UW-Madison

11:15 Panel and Audience Discussion: Policy Implications
Severa Austin, Division of Community Services, Department
of Health and Social Services
Diane Greenley, Center for Public Representation
Robert Nelson, Legal Action of Wisconsin

12:15 pm Lunch, Keynote Address
Thomas A. Loftus, Assembly Speaker

1:30 Impact of Reagan's Welfare Policy on Food Stamp Households
Maurice MacDonald, Institute for Research on Poverty

2:00 Wisconsin's Welfare Population: a Longitudinal Study
Mark R. Rank and Paul R. Voss, Applied Population
Laboratory

2:45 Panel and Audience Discussion: Policy Implications
Carol Croce, Nutrition Project
Eleanor Fitch, Wisconsin Council on Human Concerns
James Morgan, Wisconsin Taxpayers Alliance

3:45 Wrap-up/Evaluation

APPLIED POPULATION LABORATORY

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Population Notes

- No. 12 Voss, Paul R. and Stephen J. Tordella. Population Change in Wisconsin, 1950-1980.
- No. 13 Tordella, Stephen J. and Balkrishna D. Kale. Wisconsin: Population and Economic Overview.
- No. 14 Guhleman, Patricia A. and Paul R. Voss. Housing Wisconsin's Population: 1950-1980.
- No. 15 Guhleman, Patricia A. and Doris P. Slesinger. Wisconsin's Elderly Population, 1970-1980.

(All Population Notes are available free of charge.)

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The Applied Population Laboratory is a unit of the Department of Rural Sociology, University of Wisconsin-Madison, supported through the University of Wisconsin-Extension and the Experiment Station of the College of Agricultural and Life Sciences. Activities of the Laboratory include applied research, off-campus education, and consultation on the demographic aspects of public issues, particularly at the state and local level. The Applied Population Laboratory also participates in the Wisconsin State Data Center, a cooperative venture with the Demographic Services Center of the Wisconsin Department of Administration, the U.S. Bureau of the Census, and several affiliated organizations.

A list of recent publications available from the Laboratory is on the inside back cover.

Inquiries should be addressed to:

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DEMOGRAPHIC CHANGE

IN WISCONSIN:

TRENDS AND OUTLOOK

Proceedings of a
conference
held May 26, 1982
Madison, Wisconsin

Edited by
Eleanor Cautley

Population Series 80-1

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PREFACE

The first in-depth analyses of 1980 Census data for Wisconsin were completed early in 1982, shortly after detailed numbers were released by the Bureau of the Census. Demographic Change in Wisconsin: Trends and Outlook was a one-day conference designed to present a broad range of the newly analyzed 1980 data.

Five major presentations provided information on changes occurring in Wisconsin's population during the past decade, concluding with a look at future trends. This volume includes all five papers from the conference. Each paper focuses on one aspect of population analysis, presenting the most recent data for Wisconsin and making comparisons with data from previous censuses.

In the first paper, Cynthia Bautista and Doris Slesinger discuss changes in Wisconsin's household composition, comparing 1970 and 1980 Census figures. Patricia Guhleman and Paul Voss use census data from 1950 through 1980 to describe major changes occurring in Wisconsin's housing, presenting data available for individual counties. Net migration patterns from 1960 to 1980 within various groups of Wisconsin counties are discussed by Stephen Tordella. Extensive tables provide details about net number of migrants for every Wisconsin county. Balkrishna Kale and Robert Naylor analyze Wisconsin population change from 1970 to 1980 in terms of both natural increase and net migration, examining groups of urban and rural communities separately. The final paper in this volume, by Henry Krebs, presents a historical analysis of the major trends

affecting birth and death rates, concluding with a look at trends expected in the future. The sum of these five papers, including extensive numeric data, is a detailed description of patterns in Wisconsin's 1980 population, demonstrating several significant changes that have taken place since 1970.

The conference from which these proceedings are taken was sponsored by the Wisconsin State Data Center (WSDC) in Madison, Wisconsin on May 26, 1982. Co-sponsors were three affiliates of the WSDC: Dane County Regional Planning Commission, Madison Public Library, and State Historical Society of Wisconsin Library. The Applied Population Laboratory, University of Wisconsin-Extension and Demographic Services Center, Wisconsin Department of Administration are lead agencies in the WSDC, which provides census data and other demographic information to users through a variety of conferences, a newsletter, and a network of affiliate organizations.

The conference was planned by the staff of the Applied Population Laboratory, and coordinated by Nancy J. Kanaskie. The conference program is printed in the Appendix. In addition to the five papers included here, other presentations were made by Balkrishna Kale and Halliman Winsborough. Kale discussed plans for Wisconsin's county population projections, prepared by the Demographic Services Center for release in 1983. Winsborough acted as a discussant for both the morning and afternoon conference sessions, synthesizing the many trends presented during the conference.

Assistance in preparing these proceedings was ably provided by Sarah Besadny, Karen Weed and Karen Daramola. This publication continues an Applied Population Laboratory tradition of renumbering the Population Series upon release of census data for the new decade. This is the first in the new Population Series 80 set, representing the first analyses of 1980 Census data.

LIVING ARRANGEMENTS: 1980 CENSUS REVEALS
CHANGES IN THE WAY WE LIVE¹

Cynthia Bautista
and
Doris P. Slesinger
Department of Rural Sociology
University of Wisconsin

Some rapid changes have taken place in the composition of Wisconsin households over the past decade. Many of these changes are reflected in headlines such as "Birth rate continues to decline: more elementary schools to close" or "More housing units bought by single men and women" or "More young women postponing marriage and living alone."

This report discusses changes since 1970 in household and family composition in the state and in metropolitan and nonmetropolitan counties. It also describes the changes in selected demographic and economic characteristics of Wisconsin householders² over the decade³. Data are from three sources: the 1970 and 1980 Censuses of Population⁴ and the 1980 Current Population Survey⁵. The population described in this report includes all noninstitutionalized persons living in Wisconsin, with the exception of those living in group quarters such as convents, dormitories, large rooming houses and army barracks.

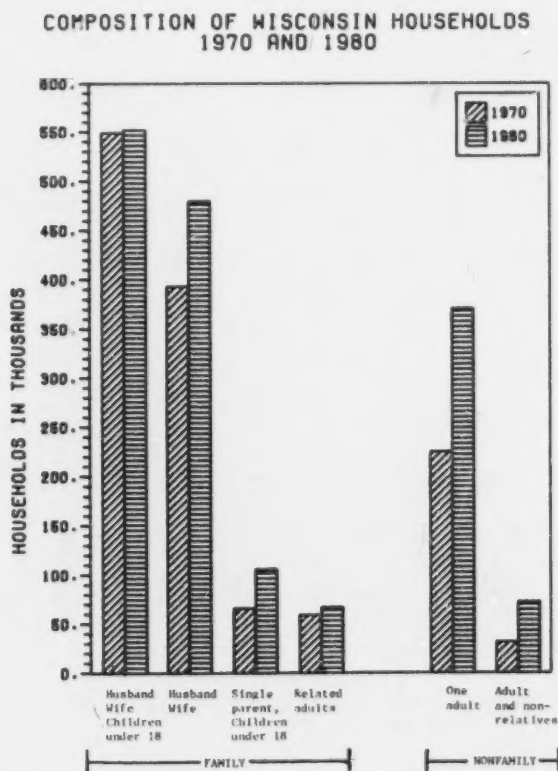
The noninstitutionalized population in 1970 consisted of 4,273,300 persons living in 1,328,500 households. By 1980, the state noninstitutionalized population rose to 4,576,886, a 7 percent

increase, whereas the number of households increased by 24 percent to 1,652,261. This is reflected in the decline of mean household size from 3.22 in 1970 to 2.77 in 1980.

Households in Wisconsin can be classified into two types: family households whose members are related by blood, marriage or adoption; and nonfamily households, whose members live alone or with nonrelatives.

Since 1970, the proportion of family households has dropped, and the proportion of nonfamily households has risen. Figure 1

Figure 1



graphically displays the changes in each type of household occurring between 1970 and 1980.

The most common type at both time periods is a married couple living with their children. Over 550,000 households contain parents with children under 18. Next in frequency are households containing a married couple living alone or with no children under 18. The third category of family households consists mainly of one parent with his or her children. This group represents about 6 percent of all households or about 106,700 households. The fourth type of family household consists of two or more related adults. This group has remained fairly constant since 1970.

Nonfamily households consist of persons living alone or with nonrelatives. Persons living with nonrelatives may be unrelated individuals sharing living quarters such as unmarried couples 'living together', two or more roommates sharing an apartment or house, a roomer living with a landlady, and a housekeeper living with a homeowner. Units consisting of persons living alone had the largest absolute growth in the decade among all household types, whereas persons living with nonrelatives had the greatest proportional increase, more than doubling in size.

Table 1 shows the numerical population estimates of each type of household for 1970 and 1980, and also indicates the percent change for each group in that time period. Since 1970, family households increased by only 13 percent, whereas nonfamily households increased by 73 percent. The largest proportional increase among family households was in the group of families with female householders,

Table 1: Composition of Wisconsin Households, 1970 and 1980

Household Type	1970		1980		Percent Change
	Percent	Number	Percent	Number	
Family Household	80.7	1,071,700	73.1	1,208,100	12.7
Married Couple Family	71.1	944,500	62.6	1,033,600	9.4
Adults Only	29.7	394,300	29.1	480,700	21.9
Children Under 18	41.4	550,200	33.5	552,900	0.5
Other Family: Male Householder	2.7	36,300	2.3	38,300	5.5
Adults Only	1.7	22,600	1.4	22,600	-0.1
Children Under 18	1.0	13,700	0.9	15,700	14.7
Other Family: Female Householder	6.9	90,900	8.2	136,200	49.8
Adults Only	2.8	37,400	2.7	45,100	20.7
Children Under 18	4.1	53,500	5.5	91,100	70.2
Nonfamily Household	19.3	256,800	26.9	444,200	73.0
Householder Living Alone	16.9	225,100	22.5	371,300	64.9
Householder Living with Nonrelatives	2.4	31,700	4.4	72,900	130.0
TOTAL HOUSEHOLDS	100.0	1,328,500	100.0	1,652,300	24.4

Source: 1970 Public Use Sample, U.S. Bureau of Census (15% State Sample);
1980 Summary Tape File No. 1, U.S. Bureau of Census (100% count)

which increased by 50 percent in the ten year period. This proportional change was greatest in metropolitan counties excluding Milwaukee (see Table 2).

Table 2: Percent Change in Type of Household in Metropolitan¹ and Nonmetropolitan Counties, 1970-1980

	Metropolitan Counties			Nonmetropolitan Counties
	Total	Counties excluding Milwaukee County	Milwaukee County	
<u>Family Household</u>	9.8	18.7	- 6.2	18.8
Married Couple Family	4.9	14.2	-15.2	16.6
Other Family: Male Householder	46.9	56.2	34.2	24.4
Other Family: Female Householder	57.4	64.9	49.2	44.9
<u>Nonfamily household</u>	65.1	73.7	53.6	91.8
TOTAL HOUSEHOLDS	20.7	28.6	7.4	32.2

Source: Kale, B.D. and R.K. Naylor. Analytical Tables on Some Aspects of Population and Household Dynamics in Wisconsin. Wisconsin Department of Administration, Madison, Wisconsin. March 1982. Table 6. 1970 Figures are from published census tables; 1980 from Summary Tape File No. 1 of the Bureau of Census.

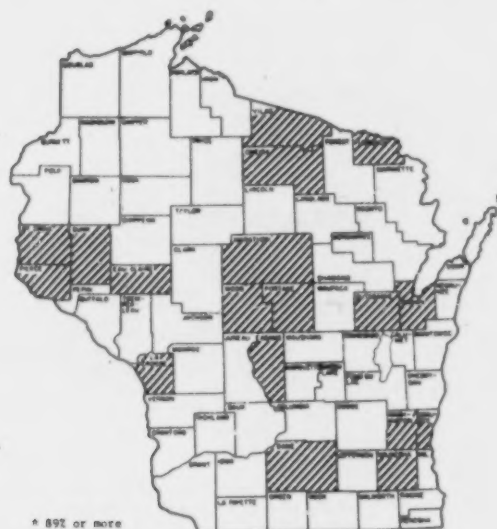
¹Metropolitan-nonmetropolitan status of counties is determined from the 1980 Census classification. Nineteen counties were classified as metropolitan in Wisconsin: Brown, Calumet, Chippewa, Dane, Douglas, Eau Claire, Kenosha, La Crosse, Marathon, Milwaukee, Outagamie, Ozaukee, Racine, Rock, St. Croix, Sheboygan, Washington, Waukesha, Winnebago. The remaining counties are considered nonmetropolitan.

Map 1 geographically displays the counties where the proportion of families with female householders grew by more than 65 percent over the decade.

The large increase in nonfamily households is due both to the 65 percent increase in the number of householders living alone and 130 percent increase in householders living with nonrelatives (Table 1). These increases are located both in metropolitan counties,



Map 2. 18 Counties with Greatest Proportional Increase*
in Nonfamily Householders, 1970-1980



Map 3. 18 Counties with Greatest Proportional Increase*
in Householders Living Alone, 1970-1980



particularly those outside Milwaukee and in nonmetropolitan counties. Counties with the largest percent increase in nonfamily households are shown on Map 2. The map reveals that almost half of these counties are nonmetropolitan.

It is also the case that counties with the highest proportional change in householders living alone (Map 3) are nonmetropolitan. For Vilas, Oneida, Florence, Wood, and Portage, this trend may be due to the influx of retirement age persons.

We now turn to various social and economic characteristics of family and nonfamily households in the state. The following discussion is based on data obtained from the 1980 Current Population Survey. It should be noted that the trends discussed below are largely characteristic of the white population, which comprises 94 percent of the total population of the state⁵.

Family Households

Table 3 classifies family households by composition. One area of change in the composition of family households concerns the

Table 3: Composition of Wisconsin Family Households, 1970 and 1980

Composition of Family Households	Total Family Households		Married Couple Family		Other Family Households			
	1970	1980	1970	1980	Male Householder		Female Householder	
Adults Only: No Children Under 18	42.4	45.4	41.7	46.5	62.2	59.0	41.1	33.1
Adults with some or all Children Under 18	57.6	54.6	58.3	53.5	37.8	41.0	58.9	66.9
Total (%)	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
(N)	1,071,700	1,208,100	944,500	1,033,600	36,300	38,300	90,900	136,200

Source: 1970 Public Use Sample, U.S. Bureau of Census (15% State Sample);
1980 Summary Tape File No. 1, U.S. Bureau of Census (10% count)

decline in proportion of households with children under 18 years of age. We can see that some decline took place in married couple families. In the other family households, the proportion with children actually increased. The overall decline in the proportion of families with children was due to a number of factors, including the fact that more young people chose to forego or postpone marriage: 56 percent of women aged 20 to 24 were married in 1970 compared to 49 percent in 1980. Map 4 shows the counties with the greatest decline in the proportion of families with children under 18 between 1970 and 1980. The great majority of these counties are metropolitan.

Families With Female Householders

One group of families, however, had a substantial increase in the presence of children--families with female householders. The proportion of such families with children under 18 increased from 59 percent in 1970 to 67 percent in 1980. It is interesting to note that most of the counties are nonmetropolitan ones where the ratio of female householder families with children to total householders had the greatest increase (see Map 5).

Map 4. 18 Counties with Greatest Proportional Decline*
in Families with Children under 18, 1970-1980



* decline of 5% or more

Map 5. 21 Counties with Greatest Proportional Increase*
in Female Householders with Children under 18,
1970-1980



* 100% or more

Over the decade, the marital status of women shifted: the proportion divorced, separated and never married increased. Thus, the increase in the presence of children was due in part to the fact that a larger proportion of female householders were divorced or separated in 1980 than in 1970, and that after a divorce or separation, children usually live with their mothers.

In order to see whether the increasing proportion of families with female householders was due primarily to a large number of women in the age groups more prone to divorce and separation, or to a real increase in marital dissolution rates within each age group, an age standardization procedure was applied⁷. This statistical procedure indicated that the increase in never married, separated

and divorced women was, indeed, due mainly to increasing rates in each of these marital states.

Economic Status

By and large, Wisconsin families improved economically from 1970 to 1980. For the state as a whole, the proportion of families with incomes below poverty level declined from 7 percent in 1970 to 6 percent in 1980. However, about one fourth of female householder families in 1980 were living on incomes below poverty level.

The proportion of family householders who were in the labor force declined from 83 percent to 79 percent (see Table 4).

Table 4: Employment Status of Family Householder
by Age and Sex, 1970 and 1980

	Total	Age				Sex	
		14-24	25-54	55-64	65+	Male	Female
<u>1970</u>							
In Labor Force	83.3	89.2	95.4	85.0	26.9	85.8	56.7
Employed	81.1	85.7	92.9	83.1	26.1	83.7	53.2
Unemployed	2.2	3.5	2.5	1.9	0.8	2.1	3.5
Not in Labor Force	16.7	10.8	4.6	15.0	73.1	14.2	43.3
TOTAL (%)	100.0	100.0	100.0	100.0	100.0	100.0	100.0
(N)	1,071,700	65,900	666,900	184,300	154,600	980,800	90,900
<u>1980</u>							
In Labor Force	79.2	85.3	94.9	76.7	10.2	81.1	66.8
Employed	74.5	76.6	89.9	71.6	9.2	76.9	59.1
Unemployed	4.7	8.7	5.0	5.1	1.0	4.2	7.7
Not in Labor Force	20.8	14.7	5.1	23.3	89.8	18.9	33.2
TOTAL (%)	100.0	100.0	100.0	100.0	100.0	100.0	100.0
(N)	1,250,386	89,774	790,703	187,919	181,990	1,079,939	170,447

Source: 1970 Public Use Sample, U.S. Bureau of Census (15% State Sample);
1980 Current Population Survey

However, the proportion of female householders in the labor force increased from 57 percent in 1970 to 67 percent in 1980. Labor force is defined to include unemployed persons who are looking for work as well as employed workers. The increase in labor force participation also included an increase in the proportion of the unemployed. This increase was especially marked among young heads 14 to 24 years old whose unemployment reached 9 percent in 1980 and among female householders who reported 8 percent unemployed in 1980.

Once again, because unemployment and unemployment rates vary by age, the age standardization procedure was applied to the total and female family householders. The results indicated that the increase in unemployment by 1980 for the total group and for female householders was mainly due to an increasing rate rather than to changing age patterns. That is, family householders are experiencing a greater rate of unemployment, even when age shifts are taken into account.

Nonfamily Households

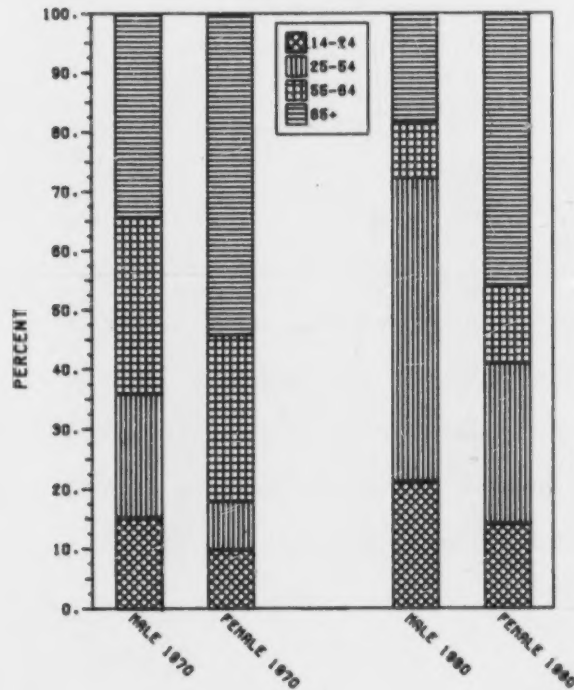
As mentioned above, nonfamily households consist of persons living alone or living with a nonrelated person or persons. There were approximately 187,367 more nonfamily households in 1980 than in 1970 in Wisconsin, representing an increase from 19 percent to 27 percent of all households. About four out of five nonfamily households contained only one person in 1980; the remaining nonfamily households contained two or more unrelated persons.

Nonfamily Householders

Among nonfamily householders in both 1970 and 1980, females outnumbered males almost two to one. The age distributions of male versus female nonfamily householders were very different (Figure 2). Although both groups were younger in 1980 than in 1970, the increase in the proportion of males in the lower age groups was higher than the proportion of females in both years. For men and women, the major increase during the ten year period was in the 25 to 54 age group and not in the young adult group or the elderly.

Figure 2

SEX BY AGE OF NONFAMILY HOUSEHOLDERS
1970 AND 1980

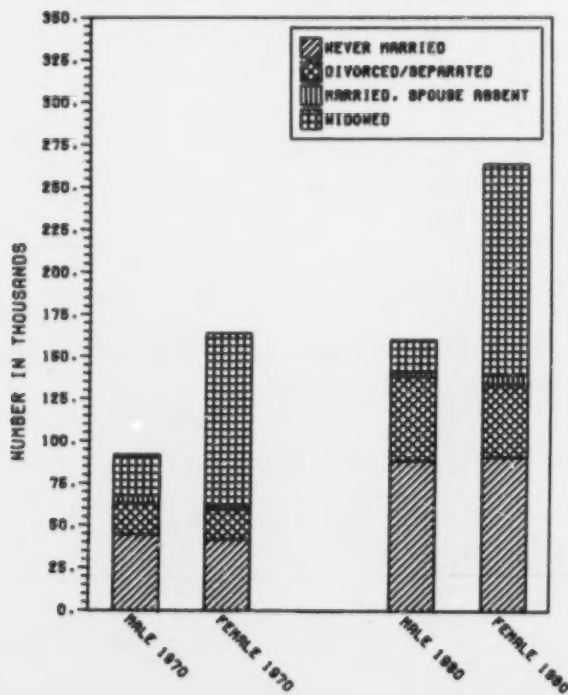


These age changes are also reflected in changes in marital status (Figure 3). For both men and women, there was an increase in both the proportion and number of those never married, divorced and separated. However, about half of the male householders were never married whereas about half of the females were widowed.

The age standardization procedure was applied to these marital status rates. This procedure indicated that even when taking into account the effect of the aging of the population, more householders were divorced and separated and fewer were widowed, especially in the case of women, reflecting the trends of postponement of marriage and increased longevity.

Figure 3

MARITAL STATUS OF NONFAMILY HOUSEHOLDERS
BY SEX, WISCONSIN 1970 AND 1980



Economic Status

Nonfamily householders were also economically better off in 1980 than in 1970. About 12 percent of the householders had incomes below the poverty line in 1980 compared with 35 percent in 1970. This applied to both males and females. However, there was still a larger proportion as well as many more females than males in the lower income categories. When the change in income distribution was taken into account through standardization procedures, the decline in poverty status was not due to the shift in age distribution but to an improvement in the economic position of householders.

Changes in poverty status by age deserve further mention. The very young and the old tend to be in poverty more than the middle age groups. In 1970, almost 40 percent of the young and half of the elderly householders were poor. All age groups had a decline in the proportion in poverty by 1980. But the decline for those 65 and older was a dramatic 39 percentage points and the proportion of those under 25 in poverty dropped by 22 percentage points.

Ten percent more nonfamily householders participated in the labor force in 1980 than in 1970. This was due to the increase in employed householders between 14 and 54 years old. However, unemployment also increased in this age group. When the standardization procedure was applied, the change in unemployment rate was only due to a shift in age distribution. The labor force participation of those older than 55 dropped significantly, offsetting the effects of increased employment among the young.

Summary

Wisconsin's population in households is undergoing a transition. Comparing the 1970 with the 1980 census, we have noted that Wisconsin exhibited a small increase (7%) in population from 1970 to 1980 but a larger increase (24%) in the number of households. About 73 percent of all households are comprised of families, a proportion that is slowly declining in favor of nonfamily households. Persons living with nonrelatives and those living alone are increasing. Women outnumber men almost two to one. Women who live alone or with nonrelatives tend to be older and widows; men tend to be younger and never married. Of the family households in Wisconsin, almost half are married couples with children, 40 percent are married couples without children, 8 percent are single parents with children and 6 percent are related adults living together. There is a trend towards more households with no children under 18, a trend which is due to the increase in average age at marriage, and the declining birth rate. The proportion of families with female householders is also increasing, due to more women experiencing divorce who have custody of their children, and to more women having births out of wedlock. In general, there has been economic improvement for family heads between 1970 and 1980. The exceptions to this are families with young or female householders. For all of these groups, the percent unemployed has increased.

Nonfamily households consist of persons living alone or with nonrelatives. Four out of five nonfamily households contained one

person living alone in 1980. This trend of increasing single person households reflects postponement of marriage, increased prevalence of divorce, and increased longevity.

There has been some improvement in economic status of persons in nonfamily households between 1970 and 1980. In 1970, over one-third of the young and almost half of the elderly were in poverty. By 1980, this declined by 22 percentage points for the young and 39 percentage points for the elderly.

The findings described for Wisconsin in this report mirror trends in the United States as a whole⁸. Demographers generally concur that the shifts in family and household composition described here will probably continue. As anticipated, the 1980 data have shown that the proportion of husband-wife units as well as the proportion of households with children has declined, whereas more adults have chosen to live alone or with nonrelatives.

FOOTNOTES

1. This research was supported by the Wisconsin Agricultural Experiment Station (Hatch grant No. 2397) through a cooperative agreement with the Economic Research Service, U.S. Department of Agriculture, the College of Agricultural and Life Sciences, University of Wisconsin-Madison/Extension. Computing assistance and facilities were provided by a grant to the Center for Demography and Ecology from the Center for Population Research, National Institute for Child Health and Human Development (No.HD 05876).
2. The 1980 census defines a householder as a person in whose name the house was owned or rented. The analogue of the householder in the 1970 census was the household head or the person regarded as head. Two types of household heads were distinguished: the head of a family and a primary individual. Among married couples, the male was considered the head for purposes of simplifying the tabulations even if the woman is considered the head by the household members. In 1980, the householder in married couple families is either the husband or the wife. Much of the following discussion is not beset by problems of the comparability of household heads in 1970 and householders in 1980 since householders of married couple families in general are not discussed. In most cases, a person classified as a nonfamily householder in 1980 was classified as a primary individual in 1970.

3. Changes in household and family composition as well as in selected characteristics of householders are expressed either in percent change or in difference of proportions between 1970 and 1980. The latter is mentioned only when it is greater than or equal to .01 level of significance.
4. Data from the 1970 Census of Population were obtained from the 1 in 100 Public Use Sample computer file of basic census records. The file used to generate the figures for this report contained household and person information from a 15 percent sample of Wisconsin. A total of 42,733 person records and 13,744 household records were processed. The 1980 census figures are complete counts from the Summary Tape File No. 1 released by the Bureau of Census.
5. Selected demographic and economic characteristics of householders in 1980 were obtained from the Wisconsin sample of the Current Population Survey which contains 2,620 person records.
6. The demographic and social characteristics of the nonwhite population, particularly family and nonfamily householders, are different from the white population. However, a discussion of nonwhite householders is excluded from this report because the 1980 CPS has a very small sample of nonwhites which makes the estimates obtained for this group unreliable.
7. The procedure used was as follows: the 1980 age-specific proportion for categories of marital status were applied to the 1970 population distribution. This produces a proportion

"expected" in 1980 if the age distribution of the population remained the same as it was in 1970. The resulting proportion divorced, separated, widowed and never married was then compared with the "actual" 1980 proportions. If they were the same, then the reported total change was due to a change in the rate, not to the shift in age distribution. This technique is also applied to changes in other characteristics, such as poverty status and unemployment which are related to the age distribution.

8. See Arthur Norton and Paul Glick, "What's happening to households?" American Demographics 1(3) March 1979.

HOUSING WISCONSIN'S POPULATION: THREE DECADES OF CHANGE

Patricia Guhleman
and
Paul R. Voss

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During the 1970s, some major changes related to Wisconsin's housing took place. Despite the high costs of housing, which have had repercussions for individuals and for the housing industry, the number of housing units increased substantially. The high housing unit growth rate from 1970 to 1980 contrasts with a relatively low population growth rate. From 1970 to 1980, for every 100 people added to Wisconsin's population, 136 housing units were added.

This paper looks at the relationship between housing unit and population growth in Wisconsin since 1950, with emphasis on the most recent intercensal decade. After a state-level overview, county-level change is examined in order to assess the extent to which smaller geographical areas exhibit patterns similar to, or different from, average state-level patterns.

Our analysis is based on census data and utilizes Census Bureau definitions and concepts. All data are from the 1950, 1960, 1970 and 1980 Censuses. In 1980, the Census Bureau defined a housing unit as a house, apartment, mobile home or trailer, group of rooms, or single room occupied or intended for occupancy as separate living quarters. Separate living quarters are those in which occupants do not live and eat with any other person in the structure, and which have direct access from the outside of the building or through a

common hall. Although the definition of a housing unit has been modified over the years in terms of the criteria for establishing separate living quarters and for identification of group quarters, the basic concept has not changed since 1960. The 1960 Census introduced the idea of separate living quarters in contrast to a dwelling unit as the core of the housing unit definition.

Changes in Numbers of Housing Units and Population

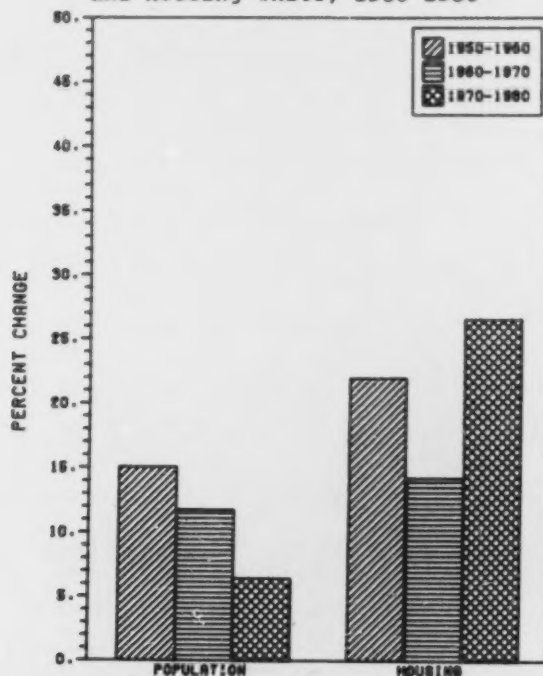
Between 1970 and 1980, Wisconsin added over 390,000 housing units to its total housing inventory. In contrast, Wisconsin's total population increased by 288,000. This is the first intercensal decade in which the absolute increase in housing units was greater than the numerical increase in people. The 390,000 housing units added during the 1970-1980 decade represent a 26.6 percent increase over the 1970 housing stock. In contrast, Wisconsin's total population increased by only 6.5 percent from 1970 to 1980. Table 1 (page 37) compares housing unit and population growth rates since 1950 in Wisconsin with those for other states in the North Central region and the United States. It indicates that the discrepancy between rates of change in housing and population growth over the last ten years is not unique to Wisconsin. Nationally, the increase in housing units from 1970 to 1980 was 28.7 percent, while population growth for the United States amounted to 11.4 percent.

The extreme gap between housing unit and population increase during the 1970s contrasts sharply with the relationship between these rates in the periods 1950 to 1960 and 1960 to 1970. In each

of the earlier decades, the increase in Wisconsin housing units was about one-and-a-half times greater than the population increase. However, from 1970 to 1980, housing unit growth surpassed population growth by a ratio of 4:1.

Figure 1 illustrates the relationship between population and housing unit growth rates since 1950. The pattern that emerged during the 1970s is not a result of new population growth rate trends. That is, the rate of population growth from 1970 to 1980 reflects a continuation of the downward trend exhibited since 1950. During the 1950s and 1960s, housing unit growth tended to parallel that of population. During the 1970s, when the rate of population increase continued to decline, housing unit growth shifted upward. This is an interesting departure from previous periods, since these two measures of change have traditionally moved together.

Figure 1: Percent Change in Wisconsin Population and Housing Units, 1950-1980



Changes in Living Arrangements

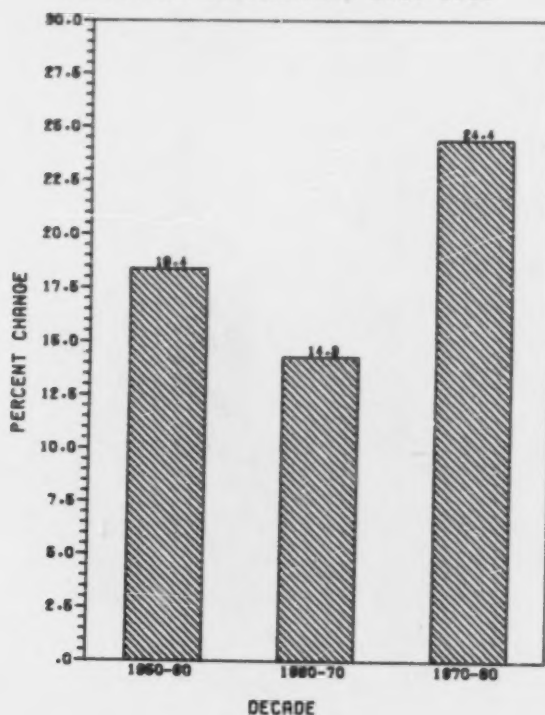
Examination of households provides some perspective on the changing patterns of housing unit growth in relationship to the population. Nearly every person enumerated by the Census lives in either a household or group quarters. Since the group quarters population represents very few people, rates of increase among the household population are nearly identical to total population increase. In addition, the percent of all people living in households has been very stable, around 97 percent since 1950. However, changes in living arrangements within the household population are highly relevant to the relationship between population and housing unit increases.

The paper in this volume by Bautista and Slesinger outlines major changes in household composition that took place during the 1970s. It emphasizes the dramatic decline in the average number of people per household--a decline due largely to an increase in the number and proportion of people living alone and to low fertility. This trend toward smaller average household size, shown in Table 1, is long term. In 1950, the average size of a Wisconsin household was 3.4 persons. Average household size decreased during the 1960s and 1970s, and by 1980 reached an all-time low of 2.8 persons.

New patterns of household formation and an increase in those population groups that have traditionally had a high propensity to form new households have created pressure for more housing units. From 1970 to 1980, the percent increase in total Wisconsin households was nearly as large as the percent increase in total

housing units. Figure 2 illustrates change in Wisconsin households since 1950. Similar to the long-term pattern of housing unit increase, the number of households increased much more rapidly in the 1970s than in the 1950s or 1960s. Most of the total increase in Wisconsin housing units from 1970 to 1980 resulted from change in the number of households. Increase in the number of households also accounted for most of the housing unit change in the two previous intercensal decades. Over the last thirty years, however, there has been very little change in the number of households as a proportion of all housing units. In 1980, households occupied 89 percent of all Wisconsin housing units. The figures for 1950, 1960, and 1970 are also around 90 percent.

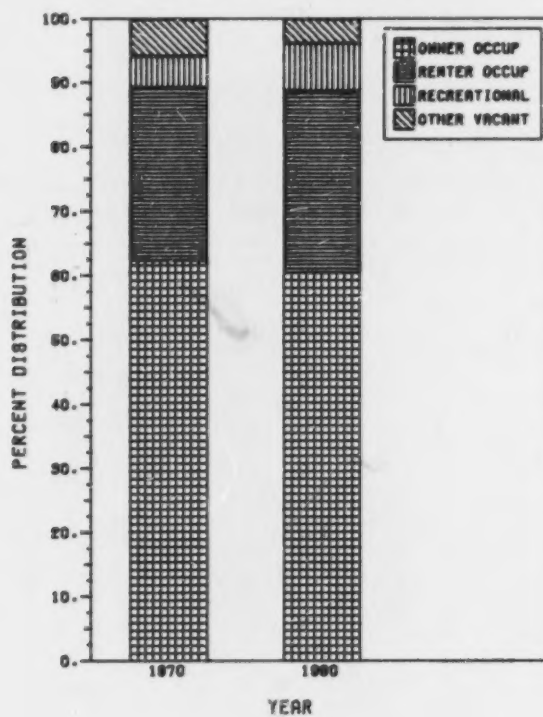
Figure 2: Percent Change in Number of Wisconsin Households, 1950-1980



Changes in Housing Stock

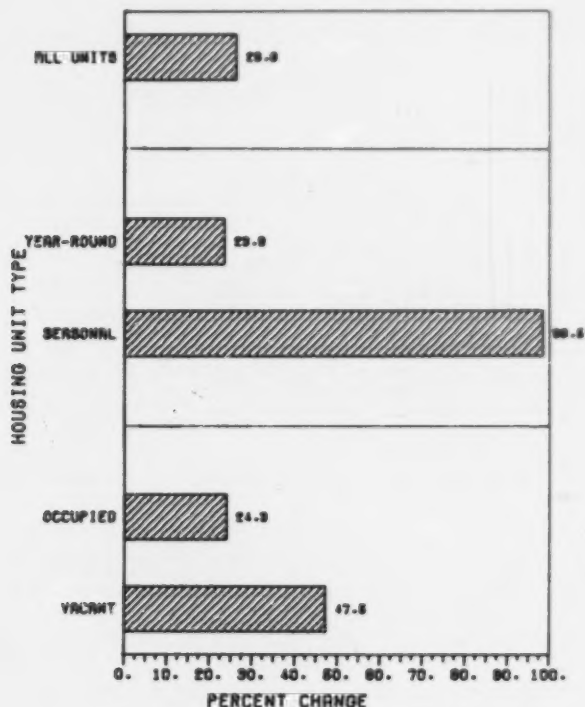
Figure 3 shows components of Wisconsin's housing stock in 1970 and 1980. Occupied housing units, equivalent to households, maintained their proportionate share of the total housing inventory, and the percent that was owner occupied also remained quite stable. There was, however, some increase from 1970 to 1980 in the proportion of recreational units.¹

Figure 3: Components of Wisconsin's Housing Stock, 1970 and 1980



While the proportionate distribution of housing types is not very different in 1980 than it was in 1970, specified types of structures exhibited considerable variation in growth rates, and made differential contributions to total housing unit increase. About 94 percent of all Wisconsin housing units are year-round units. This means that the percent increase from 1970 to 1980 in year-round units differs little from total housing unit increase, shown in Figure 4.

Figure 4: Percent Change in Wisconsin Housing Units by Type, 1970 to 1980



Houses not designated as year-round constitute seasonal housing units. These include migrant worker quarters and part-year recreational units. Because of the range of structures included in the seasonal housing stock, precise definition is difficult. Figure 4 demonstrates the dramatic percentage increase, almost 100 percent, which took place among seasonal units between 1970 and 1980. Yet the overall effect of this change is modest, since seasonal units represent only 6 percent of all housing units. Nonetheless, seasonal units accounted for about 14 percent of total housing unit increase from 1970 to 1980.

The bottom panel of Figure 4 contrasts the rates of increase from 1970 to 1980 for vacant and occupied housing units. Vacancies include seasonal and year-round units that are held for occasional use, vacant units that are for sale or rent, and some other vacant units. The increase of 13,000 vacant units during the 1970s can be attributed in part to a change in the Census Bureau's definition of a housing unit. In particular, the 1980 housing unit inventory includes vacant mobile homes if they were intended for occupancy where located; similar units were excluded in 1970. This definitional change may explain the especially large increase in seasonal homes noted above, although undoubtedly some real increase in seasonal housing units took place. The net impact of definition changes is impossible to determine at this time, and implications may be more severe for particular areas within the state than for the overall state average.

County-level Change in Housing Units

Although the large discrepancy between housing units and population growth rates from 1970 to 1980 captures our attention at the state level, for individual counties there is a general correspondence between the two rates. That is, counties with substantial increases in their housing stock also had above average population growth. Similarly, where housing units expanded slowly, population growth tended to be slow. These rates are shown for each county in Table 2.

Figure 5 illustrates housing unit growth in Wisconsin counties relative to the state average for the decades 1950 to 1960, 1960 to 1970, and 1970 to 1980. Among Wisconsin's 72 counties, 22 counties had housing unit increases of at least 39 percent during the 1970 to 1980 decade (see the darkest shading on Figure 5). This is substantially above the state average of 27 percent. Although population increases vary among these 22 counties, in most of them population increased by more than 20 percent. The 22 counties that experienced very high rates of growth in housing units can be regionally differentiated. One cluster of high growth counties is found in northern Wisconsin, including Vilas, Oneida, Forest and Florence Counties. A second group lies in the northwestern part of the state and includes Burnett, Washburn, Sawyer and Bayfield Counties. Price County, located between the two northern county clusters, also had a substantial increase in housing units, but in contrast to other counties with high housing unit growth rates, population increased only slightly in Price county.

Figure 5: Percent Change in the Number of Housing Units in Wisconsin Counties Relative to State Average: 1950-1960, 1960-1970, 1970-1980^a



^aCalculations are not shown for Menominee County for 1950-1960 and 1960-1970.

Another cluster of high growth counties is in central Wisconsin, with major increases in both housing units and population between 1970 and 1980. Adams County underwent extreme change, with the housing stock increasing by 92 percent from 1970 to 1980. Four counties adjacent to Adams--Marquette, Portage, Juneau, and Waushara--also experienced considerable growth, but to a lesser extent than Adams. In the Lake Michigan area, high rates of housing unit increase and above average population growth took place in Menominee, Oconto and Door Counties. Marinette County, like Price, had rapid housing unit expansion, but very little population increase.

The four remaining counties with substantial housing unit increase between 1970 and 1980 are Washington, Waukesha, Ozaukee, and St. Croix. They are distinguished from other counties with substantial housing unit increases in two major ways. First, all are part--the suburban part--of major metropolitan areas. Washington, Waukesha, and Ozaukee are included in the Milwaukee metropolitan area; St. Croix, in Minneapolis-St. Paul. These represent the only metropolitan counties in Wisconsin that can be considered high growth areas. Second, the onset of high population and housing unit growth has occurred more recently among nonmetropolitan than among metropolitan counties. These four suburban counties showed substantial population increase in every decade since 1950. In contrast, nearly all of the nonmetropolitan counties with substantial housing unit increase in the last ten years experienced absolute population losses during the 1950s.

Just over one-third of Wisconsin counties reported rates of housing unit increase for 1970-1980 that were below the state average of 27 percent. (These counties are represented by the lightest shading in Figure 5.) In all but three of these relatively slow growing counties (Jefferson, Monroe, and Shawano), population increase was less than 10 percent over the period. Only two of the most northern counties, Douglas and Ashland, fall into this group of low housing growth rates between 1970 and 1980. Among most of these counties, the low population and housing growth rates of the 1970s actually represent higher levels of growth than occurred during the 1950s and 1960s. However, declines in both rates over the last thirty years characterize a few of the counties.

The remaining 23 Wisconsin counties experienced moderate rates of housing unit and population increase between 1970 and 1980, equal to or slightly better than the state average. With the exception of Crawford and Iron Counties, all of these counties are either metropolitan or adjacent to a metropolitan county.

County-level Change in Housing Stock

As noted earlier, the increase in number of housing units statewide can be linked to the decline in average household size. Table 3 shows that every Wisconsin county experienced a decrease in average number of persons per household between 1970 and 1980, as part of a trend spanning several decades. The increase in number of households that resulted from this decline explains some of the increase in housing units. When county-level data are examined,

however, it is apparent that we must turn to the components of housing stock to explain more of the increase in housing units.

Housing stock can be discussed in terms of three categories. First, the number of year-round occupied housing units is equal to the number of households in any given area. Second, seasonal units include non-year-round units set aside for occasional recreational use, plus a small number of units used for housing migrant farm workers. Third, year-round vacant units may be either units held for occasional use or units for sale, for rent, or boarded up. Table 4 shows the occupied and seasonal housing units as percentages of the total housing stock in each county. Vacant units constitute the residual and are not shown.

Counties with the greatest increase in number of housing units can be seen in Figure 5 and Table 2. In 16 of these 22 counties, less than 70 percent of the housing units are year-round occupied structures. These counties are all located in the state's northern and central regions, and many of them rely on tourism as a primary factor in their economic base. As shown in Table 4, many of these counties experienced dramatic increases in the proportion of units classified as seasonal between 1970 and 1980. Some of this change may be due to definitional changes (especially the status of vacant mobile homes).

Summary

Wisconsin is a highly diversified state in terms of population distribution and the many factors that influence changes in the

housing stock. It is not surprising that county-level profiles of housing are quite different. For the state as a whole, the relationship between rates of population and housing unit increase from 1970 to 1980 is explained primarily by decreasing household size and the large increase in the number of households. While the long-term decline in the average number of people per household and the recent upturn in number of households is repeated in each Wisconsin county, the relative contribution of these phenomena to total housing unit growth varies considerably among the counties.

Metropolitan or nonmetropolitan status of counties is an important source of differentiation for the relationship between housing unit and population increase. The majority of nonmetropolitan counties not located next to a metropolitan county experienced increases of 40 percent or more in housing units over the last 10 years. In many of these counties, occupied housing units constitute a relatively small percent of the total housing stock. In contrast, most metropolitan counties, where the vast majority of housing units are occupied, experienced somewhat lower rates of housing unit increase from 1970 to 1980. In metropolitan counties, housing unit increase seems more closely related to living arrangements among residents than in nonmetropolitan areas.

The major gap between rates of increase from 1970 to 1980 in housing units and population constitutes a new demographic phenomenon. For the state as a whole, this is largely a function of new patterns of household composition. However, in many Wisconsin

counties, especially those noted for tourism, the increase in non-household housing units has been as, or more, important than changes in household composition.

FOOTNOTE

1. "Recreational units" are not a Census-designated category. We approximate the number of recreational units by adding together the number of seasonal units and year-round vacant units that are held for occasional use.

Table 1: Selected Population and Housing Characteristics: Wisconsin, North Central Region, and U.S., 1950-1980

Characteristic	Number			Percent Increase		
	1950	1960	1970	1980	1950-1960	1970-1980
Total Population						
Wisconsin	3,434,575	3,951,777	4,417,821	4,705,767	15.1	11.8
N.C. Region	44,460,762	51,619,139	56,571,653	58,854,236	16.1	9.6
U.S.	151,325,798	179,323,175	203,235,298	266,504,825	18.5	13.3
					11.4	
Household Population						
Wisconsin	3,320,043	3,854,086	4,283,702	4,577,144	16.1	11.2
N.C. Region	42,887,474	50,367,835	55,036,934	57,359,979	17.4	9.3
U.S.	145,115,814	174,423,995	197,399,913	220,762,922	20.2	13.2
					11.8	
Number of Housing Units						
Wisconsin	1,055,843	1,288,620	1,472,322	1,863,819	22.0	14.3
N.C. Region	13,745,646	16,797,804	18,973,217	22,819,029	22.2	12.9
U.S.	46,137,076	58,326,357	68,679,030	88,396,513	26.4	17.7
					28.7	
Number of Households						
Wisconsin	968,184	1,146,040	1,328,804	1,652,254	18.4	16.0
N.C. Region	12,971,966	15,378,749	17,581,814	20,856,453	18.6	14.0
U.S.	43,554,000	53,023,935	63,637,721	80,376,609	21.7	20.0
					26.3	
Average Number of Persons/Household						
Wisconsin	3.43	3.36	3.22	2.77	--	--
N.C. Region	3.31	3.28	3.14	2.75	--	--
U.S.	3.47	3.85	3.11	2.75	--	--

Sources: 1950 Census of Housing, H-A49; 1950 Census of Population, Vol. II, Part 49; 1960 Census of Housing, HC(1)-1; 1960 Census of Population, PC(1)-51B; 1970 Census of Housing, HC(1)B51; 1970 Census of Population, Vol. I, Part 51; 1980 Census of Population and Housing, Advance Reports, PHC80-V-51, with March 1982 Census Bureau revisions; 1980 Census of Population Supplementary Reports, PC80-S1-2; 1980 Census Summary Tape File One; 1970 Census of Population: Number of Inhabitants, United States Summary, PC(1)-A1 U.S.; 1970 Census of Housing, Vol. I, Housing Characteristics for States, Cities, and Counties, Part 1, United States Summary.

Table 2: Percent Change in Population and Housing Units: Wisconsin Counties, 1950-1980

County	Population			Housing Unit			Total Count	
	Percent Change			Percent Change			1980	1980
	1950-1960	1960-1970	1970-1980	1950-1960	1960-1970	1970-1980	Population	Housing
State Total	15.06	11.79	6.52	22.05	14.26	26.60	4,705,767	1,863,897
Adams	-4.30	22.05	45.73	24.30	47.25	92.37	13,457	10,084
Ashland	-10.72	-3.64	0.24	-0.47	5.05	19.41	16,783	7,781
Barron	-1.25	-0.92	14.06	10.04	-0.20	35.35	38,730	17,153
Bayfield	-13.44	-1.91	18.31	-0.05	15.72	42.02	13,822	9,642
Brown	27.23	26.51	10.77	29.36	27.23	37.80	175,280	62,282
Buffalo	-3.51	-3.23	4.12	1.90	2.18	19.16	14,309	5,478
Burnett	-9.98	0.67	33.03	-1.18	50.52	54.66	12,340	10,359
Calumet	18.20	23.96	11.82	17.37	19.40	32.27	30,867	10,428
Chippewa	5.27	5.81	9.24	10.50	10.74	28.03	52,127	19,203
Clark	-2.87	-3.70	8.40	1.28	2.43	24.93	32,910	12,384
Columbia	7.89	9.38	7.65	13.16	14.95	23.85	43,222	17,794
Crawford	-7.37	-6.72	8.55	-2.27	4.41	30.02	16,556	6,770
Dane	31.14	30.70	11.46	39.95	37.55	36.60	323,545	126,275
Dodge	9.65	9.24	8.78	14.47	12.42	23.86	75,064	26,985
Door	-0.89	-2.80	24.49	34.74	-11.26	42.17	25,029	15,324
Douglas	-3.65	-0.78	-0.53	9.21	-0.19	19.30	44,421	20,141
Dunn	-4.33	10.84	18.36	2.26	6.17	34.69	34,314	11,886
Eau Claire	7.59	15.30	17.24	13.13	16.10	36.61	78,805	28,973
Florence	-8.49	-4.04	26.50	6.90	22.07	57.74	4,172	3,341
Fond du Lac	10.70	12.63	5.20	14.55	12.91	22.63	88,964	31,739
Forest	-20.08	1.98	17.59	12.67	15.27	47.26	9,044	6,749
Grant	7.14	8.96	6.90	10.08	6.99	25.97	51,736	18,204
Green	6.95	3.34	12.35	11.71	7.97	27.31	30,012	11,317
Green Lake	4.54	9.47	8.84	15.83	11.98	21.29	18,370	8,319
Iowa	0.11	-1.66	2.57	1.89	2.71	23.06	19,802	7,568

Table 2, continued

County	Population				Housing Unit				Total Count	
	Percent Change				Percent Change				1980 Population	1980 Housing
	1950- 1960	1960- 1970	1970- 1980	1980	1950- 1960	1960- 1970	1970- 1980	1980		
Iron	-10.14	-16.56	3.02	32.84	1.24	36.06	6,730	5,098		
Jackson	-5.74	1.15	9.83	3.77	7.52	23.47	16,831	6,975		
Jefferson	16.31	19.89	10.14	21.86	15.32	25.17	66,152	24,030		
Juneau	-7.61	5.52	14.00	8.72	11.35	42.91	21,039	9,938		
Kenosha	33.73	17.20	4.43	32.39	16.25	21.47	123,137	47,506		
Kewaunee	5.27	3.71	3.05	10.06	6.82	19.28	19,539	7,023		
La Crosse	7.22	11.04	13.16	15.41	13.00	30.84	91,056	33,277		
Lafayette	0.03	-3.78	-0.25	3.59	-0.30	17.45	17,412	6,293		
Langlade	-9.37	-3.49	3.94	-0.41	10.59	25.60	19,978	9,821		
Lincoln	0.46	5.20	13.00	15.47	15.70	30.29	26,555	12,780		
Manitowoc	12.00	9.41	0.76	15.44	11.77	18.61	82,918	30,140		
Marathon	10.63	9.66	14.17	16.01	14.49	33.53	111,270	39,752		
Marinette	-3.04	3.32	9.78	13.24	13.92	45.66	39,314	22,559		
Marquette	-3.65	4.10	31.66	14.88	14.50	52.47	11,672	7,128		
Menominee	--	--	29.38	--	--	88.66	3,373	1,327		
Milwaukee	18.94	1.76	-8.47	29.34	6.72	8.07	964,988	378,000		
Monroe	-0.44	1.18	10.96	5.78	9.79	25.30	35,074	12,741		
Oconto	-4.30	1.76	13.28	17.32	13.05	41.79	28,947	16,940		
Oneida	7.09	10.47	27.79	38.65	28.67	54.62	31,216	23,157		
Outagamie	24.56	17.29	7.87	24.90	19.66	30.58	128,799	43,930		
Ozaukee	64.55	41.67	22.99	57.93	37.95	46.70	66,981	22,520		
Pepin	-1.74	-0.18	2.16	-1.17	6.89	22.23	7,477	2,881		
Pierce	4.92	18.44	16.87	6.75	15.60	32.30	31,149	10,354		
Polk	0.10	6.80	21.32	12.35	16.32	37.54	32,351	16,228		
Portage	6.04	28.61	20.78	12.61	25.16	44.13	57,420	19,901		

Table 2, continued

County	Population			Housing Unit			Total Count	
	Percent Change			Percent Change			1980	1980
	1950-1960	1960-1970	1970-1980	1950-1960	1960-1970	1970-1980	Population	Housing
Price	-12.08	1.04	8.73	11.48	-1.30	41.88	15,788	8,727
Racine	29.38	20.49	1.34	28.68	20.35	18.43	173,132	62,565
Richland	-8.11	-3.42	2.32	-0.04	4.26	17.81	17,476	6,984
Rock	22.78	15.85	5.65	25.97	16.87	24.61	139,420	52,103
Rusk	-11.89	-3.76	9.49	-1.40	3.91	31.37	15,589	7,194
St. Croix	12.58	17.80	25.93	14.91	18.08	43.83	43,262	14,924
Sauk	-5.09	7.95	11.30	2.62	12.35	27.83	43,469	17,454
Sawyer	-8.21	2.06	32.81	29.31	-10.76	71.31	12,843	11,053
Shawano	-2.55	-4.95	10.04	5.68	5.76	26.13	35,928	15,246
Sheboygan	7.26	11.77	4.42	13.56	11.20	19.69	100,935	37,351
Taylor	-3.32	-4.96	10.96	2.39	-0.18	29.84	18,817	7,163
Trempealeau	-1.49	-0.14	12.05	6.04	3.79	27.56	26,158	9,744
Vernon	-8.04	-4.31	4.42	-0.22	1.25	20.04	25,642	10,141
Vilas	-0.33	17.42	50.89	41.92	4.40	87.19	16,535	18,388
Walworth	25.93	21.15	12.71	18.43	14.35	29.58	71,507	33,397
Washburn	-11.69	2.91	24.27	5.76	7.38	51.95	13,174	8,716
Washington	36.04	38.42	32.91	33.02	28.74	51.74	84,848	28,363
Waukesha	84.22	46.18	21.18	72.07	37.93	41.97	280,326	92,622
Waupaca	0.81	6.90	13.37	7.66	13.67	29.83	42,831	18,142
Waushara	-3.04	9.62	25.22	21.99	15.26	39.88	18,526	11,242
Winnebago	18.47	20.40	1.35	19.70	20.61	23.87	131,703	49,714
Wood	17.04	10.59	11.38	19.26	16.57	32.63	72,799	26,186

Sources: 1950 Census of Population, Vol. II, Part 49; 1970 Census of Population, Vol. 1, Part 51; 1980 Census of Population, Vol. 1, Part 51; 1950 Census of Housing, H-149; 1960 Census of Housing, HC(1)-1; 1980 Census of Population and Housing, PHC80-V-51, with March 1972 updates.

Note: Menominee County was created in 1961 from Oconto and Shawano Counties.

Table 3: Average Number of Persons per Household in Wisconsin
Counties: 1950-1980

County	Year			
	1950	1960	1970	1980
State total	3.43	3.36	3.22	2.77
Adams	3.31	3.12	3.03	2.63
Ashland	3.44	3.30	3.03	2.65
Barron	3.49	3.37	3.16	2.77
Bayfield	3.44	3.27	3.06	2.69
Brown	3.60	3.64	3.53	2.86
Buffalo	3.61	3.45	3.26	2.83
Burnett	3.31	3.16	2.86	2.67
Calumet	3.67	3.77	3.73	3.15
Chippewa	3.64	3.57	3.40	2.95
Clark	3.60	3.52	3.35	2.92
Columbia	3.34	3.30	3.15	2.74
Crawford	3.68	3.58	3.26	2.84
Dane	3.36	3.29	3.09	2.56
Dodge	3.45	3.40	3.28	2.89
Door	3.45	3.31	3.03	2.67
Douglas	3.27	3.17	3.00	2.60
Dunn	3.54	3.38	3.12	2.80
Eau Claire	3.40	3.33	3.12	2.71
Florence	3.45	3.27	3.21	2.74
Fond du Lac	3.43	3.45	3.33	2.88
Forest	3.70	3.39	3.25	2.87
Grant	3.45	3.48	3.38	2.91
Green	3.29	3.27	3.11	2.75
Green Lake	3.26	3.16	3.05	2.69
Iowa	3.47	3.54	3.42	2.89
Iron	3.41	3.17	2.82	2.48
Jackson	3.51	3.37	3.15	2.72
Jefferson	3.27	3.25	3.15	2.79
Juneau	3.51	3.30	3.14	2.73
Kenosha	3.36	3.36	3.26	2.80

Table 3, continued

County	Year			
	1950	1960	1970	1980
Kewaunee	3.64	3.64	3.43	2.99
La Crosse	3.40	3.30	3.12	2.69
Lafayette	3.55	3.60	3.45	2.94
Langlade	3.70	3.50	3.23	2.80
Lincoln	3.47	3.32	3.17	2.76
Manitowoc	3.47	3.43	3.31	2.85
Marathon	3.70	3.61	3.39	2.92
Marinette	3.50	3.36	3.12	2.73
Marquette	3.25	3.16	2.96	2.65
Menominee	--	--	5.00	4.22
Milwaukee	3.34	3.21	3.04	2.59
Monroe	3.55	3.51	3.24	2.83
Oconto	3.68	3.51	3.25	2.87
Oneida	3.36	3.35	3.10	2.68
Outagamie	3.63	3.68	3.57	2.96
Ozaukee	3.51	3.65	3.66	3.04
Pepin	3.67	3.53	3.38	2.88
Pierce	3.51	3.46	3.35	2.93
Polk	3.45	3.31	3.14	2.80
Portage	3.72	3.55	3.43	2.93
Price	3.43	3.28	3.04	2.72
Racine	3.37	3.39	3.35	2.86
Richland	3.50	3.41	3.16	2.75
Rock	3.30	3.33	3.26	2.79
Rusk	3.59	3.46	3.20	2.85
St. Croix	3.56	3.56	3.48	2.99
Sauk	3.43	3.38	3.17	2.75
Sawyer	3.37	3.18	2.98	2.71
Shawano	3.70	3.53	3.24	2.86
Sheboygan	3.34	3.24	3.16	2.78

Table 3, continued

County	Year			
	1950	1960	1970	1980
Taylor	3.74	3.72	3.51	3.01
Trempealeau	3.54	3.38	3.20	2.80
Vernon	3.47	3.34	3.11	2.72
Vilas	3.31	3.11	2.92	2.62
Walworth	3.25	3.28	3.16	2.74
Washburn	3.38	3.15	2.96	2.67
Washington	3.55	3.64	3.63	3.14
Waukesha	3.51	3.66	3.66	3.11
Waupaca	3.36	3.24	3.07	2.76
Waushara	3.32	3.16	3.00	2.65
Winnebago	3.37	3.36	3.22	2.70
Wood	3.62	3.59	3.41	2.87

Sources: Calculations based on 1950 Census of Population, Vol. II, Characteristics of the Population, Part 49, Table 24; 1960 Census of Population, General Population Characteristics: Wis., PC(1)-51B, Table 28; 1970 Census of Population, Vol. I, Part 51, Table 36; 1980 Census Supplementary Reports: Population and Households, PC80-S1-2.

Note: Menominee County was created in 1961 from Oconto and Shawano Counties.

Table 4: Year-Round Occupied and Seasonal Housing Units as Percents of Total Housing Stock:
Wisconsin Counties, 1950-1980

	1950		1960		1970		1980	
	Year- Round Occupied	Seasonal	Year- Round Occupied	Seasonal	Year- Round Occupied	Seasonal	Year- Round Occupied	Seasonal
State total	91.63	4.94	88.96	6.33	90.25	3.80	88.65	5.95
Adams	82.51	9.08	67.72	24.86	57.76	12.13	47.99	36.14
Ashland	88.83	5.73	83.14	9.79	81.35	6.52	78.43	11.05
Barron	85.56	8.92	79.59	12.47	83.69	9.66	80.28	12.44
Bayfield	67.36	20.85	61.14	26.90	55.75	26.60	53.00	38.43
Brown	95.43	2.16	93.96	1.78	96.38	0.88	96.19	0.44
Buffalo	92.03	2.63	90.75	3.62	90.19	0.11	90.95	3.74
Burnett	68.27	21.34	65.12	25.06	48.04	30.25	44.00	39.94
Calumet	90.51	6.10	89.10	6.74	93.13	3.22	92.96	3.64
Chippewa	89.87	5.36	88.13	5.85	89.23	4.24	89.47	5.98
Clark	93.00	1.76	90.54	4.04	89.29	1.90	89.04	3.88
Columbia	90.53	5.60	87.31	8.27	86.75	6.64	87.30	6.92
Crawford	93.26	2.16	90.54	3.15	88.53	1.94	84.49	5.76
Dane	95.96	1.89	94.41	1.60	95.82	0.56	95.51	0.54
Dodge	94.60	3.08	92.18	4.10	92.69	4.13	92.09	3.51
Door	66.43	27.35	50.62	38.82	60.54	24.45	60.08	20.26
Douglas	88.27	5.35	80.92	45.71	83.92	8.42	81.76	11.35
Dunn	92.31	2.83	89.47	4.31	94.18	-1.39	92.94	1.62
Eau Claire	95.58	1.41	93.68	1.47	94.78	0.99	94.33	1.18
Florence	66.97	21.57	60.00	36.02	48.21	27.76	44.72	48.88
Fond du Lac	93.56	4.08	91.80	4.06	94.31	2.19	94.11	2.40
Forest	71.47	20.12	55.11	37.20	49.51	20.01	44.82	41.37
Grant	95.44	1.48	91.54	2.36	92.42	0.88	91.66	3.41
Green	96.89	0.84	94.25	2.02	94.35	0.39	95.07	0.50
Green Lake	85.08	9.66	79.28	8.87	79.91	6.01	80.95	13.46
Iowa	94.15	0.88	90.78	2.32	90.21	1.12	89.42	3.85

Table 4, continued

	1950		1960		1970		1980	
	Year- Round	Seasonal	Year- Round	Seasonal	Year- Round	Seasonal	Year- Round	Seasonal
Iron	90.81	4.20	66.44	28.75	60.98	18.25	52.26	28.01
Jackson	89.87	3.32	84.96	8.34	84.14	1.81	87.07	6.92
Jefferson	92.42	5.04	88.76	6.22	92.72	3.04	92.65	2.58
Juneau	92.74	1.34	84.08	6.71	83.22	4.76	76.42	17.09
Kenosha	86.52	10.78	87.82	8.48	90.69	4.98	90.65	3.40
Kewaunee	94.55	1.60	90.78	3.41	93.29	2.28	92.17	2.52
La Crosse	97.41	0.59	93.77	1.49	95.42	0.44	96.21	0.59
Lafayette	97.94	0.15	93.10	1.15	93.43	0.17	93.31	1.05
Langlade	82.94	11.06	79.97	13.51	75.32	3.12	71.97	21.54
Lincoln	85.66	9.10	78.23	17.06	74.38	14.85	73.36	21.29
Manitowoc	95.80	1.46	94.44	1.79	95.85	1.19	94.64	1.76
Marathon	95.43	1.02	93.83	1.41	95.32	0.42	94.85	1.03
Marinette	83.50	9.65	74.59	19.07	72.65	7.43	62.64	27.28
Marquette	75.75	16.69	65.47	27.87	63.23	21.90	61.18	21.55
Menominee	--	--	--	--	73.72	19.46	60.21	11.38
Milwaukee	98.28	0.06	96.08	0.15	96.81	0.03	96.81	0.03
Monroe	94.08	1.10	89.97	4.04	91.27	0.49	93.35	1.26
Oconto	78.61	16.61	67.17	27.92	65.16	20.26	58.93	23.67
Oneida	72.09	21.18	55.83	37.53	51.79	24.06	49.34	38.81
Outagamie	97.62	0.14	96.44	0.54	97.52	0.19	97.33	0.14
Ozaukee	93.95	3.68	93.61	2.86	96.10	0.46	96.64	0.57
Pepin	90.77	2.11	92.61	2.81	90.37	4.71	88.55	4.82
Pierce	93.52	1.80	92.61	2.60	93.75	1.05	94.89	1.01
Polk	79.43	11.67	73.52	18.34	70.66	18.50	70.21	20.01
Portage	93.08	2.42	91.33	3.62	90.61	2.52	92.02	2.41

Table 4, continued

	1950			1960			1970			1980		
	Year- Round	Occupied	Seasonal	Year- Round	Occupied	Seasonal	Year- Round	Occupied	Seasonal	Year- Round	Occupied	Seasonal
Price	84.90		6.92	69.87		19.95	76.70		5.09	65.37		22.36
Racine	92.06		5.99	92.80		4.08	94.26		1.44	94.97		1.49
Richland	95.52		0.49	89.92		3.17	90.22		0.22	89.48		3.54
Rock	95.83		1.97	93.95		1.23	94.76		0.43	94.12		1.43
Rusk	85.99		5.52	80.53		8.35	79.29		7.25	74.17		16.61
St. Croix	93.54		2.48	91.89		3.72	93.34		1.46	94.87		1.43
Sauk	92.76		1.82	89.37		4.22	88.86		4.29	88.86		4.83
Sawyer	53.35		33.00	40.47		54.52	49.67		25.42	42.23		46.68
Shawano	86.47		9.21	83.73		10.62	82.12		8.20	80.99		11.67
Sheboygan	95.55		2.31	93.34		3.15	96.14		0.94	95.00		1.70
Taylor	90.64		3.32	86.30		7.31	86.48		1.54	86.10		7.44
Trempealeau	94.94		0.86	92.42		1.30	92.93		0.80	93.40		1.19
Vernon	95.10		0.99	90.34		2.22	91.75		0.88	91.51		2.67
Vilas	42.31		52.16	31.80		63.56	37.73		46.02	33.97		51.93
Walworth	64.90		29.84	68.39		26.17	71.95		17.75	74.23		13.64
Washburn	68.40		23.84	60.95		33.75	61.85		28.10	56.02		32.79
Washington	85.76		11.36	86.31		8.33	93.01		4.35	94.19		2.25
Waukesha	85.72		10.52	89.63		5.99	94.93		2.37	95.61		1.36
Waupaca	88.53		7.20	86.14		8.82	84.33		5.51	82.43		10.78
Waushara	72.81		16.52	61.02		32.55	61.09		16.64	61.41		30.13
Winnebago	93.91		3.72	93.55		2.90	95.31		1.93	94.31		2.39
Wood	96.15		0.63	95.69		1.10	95.66		0.32	95.73		0.72

Source: 1950 Census of Housing, H-149; 1960 Census of Housing, HC(1)-1; 1970 Census of Housing, HC(1)-B51; 1980 Summary Tape File One for Wisconsin.

Note: Menominee County was created in 1961 from Oconto and Shawano Counties.

NET MIGRATION FOR WISCONSIN COUNTIES, 1960 TO 1980

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The main factor behind population growth at the local level is migration. On first evaluation one might think that the way that people get added to the population of an area is through births, and the way they leave is through deaths. While these factors cannot be discounted, the reason behind a large number of births in one locale is often that many people of prime child-bearing age (20-34) have moved in. This is especially true now, in times of relatively low birth rates nationally. Similarly, while many deaths can occur through people "aging in place," a much greater effect on the number of deaths can be created by substantial numbers of older people moving into an area. This paper will examine patterns of migration for Wisconsin counties to see which are growing from migration of the young, and which from migration of the old, and which are experiencing outmigration of particular age groups.

"Net migration," the measure used here, is a somewhat counter-intuitive means for measuring migration. Net migration is the net change in population due to the balance of in- and out-migration. Thus, if a county had 1000 people move in and 1001 move out, the net migration would be only 1. It would appear to make more sense to measure directly how many people moved into an area and how many people moved out. While this may seem simple enough, it is technically much more difficult to measure. The U.S.

Census of Population does ask people where they lived five years ago, and finding out how many people moved into a county during those five years is a simple matter. Tabulating responses of all those who moved out of a county over five years, however, entails searching the records for the other 3000 counties of the United States to find all the people who left one particular county. Even then, those who moved overseas would be missed. This process was carried out for the 1970 Census, but the results did not appear until 1977. The virtue of net migration is that all one needs is the beginning population of a county or other area, the ending population of that area, and how many births and deaths occurred to people of the area during the period. With this information and some assumptions about the age structure of mortality, the net change in population due to migration can be computed easily and in a timely fashion for a variety of age groups as well as for the whole population. Net migration data is tabulated for age groups because of the different migration behaviors exhibited at various ages. For example, an area that offers many job opportunities may attract many more younger migrants than older ones.

In this paper, net migration patterns for Wisconsin counties will be examined first for the state as a whole, then for analytic groups of counties, and finally at the county level. Net migration by age is traced over two decades: 1960 to 1970, and 1970 to 1980. Data for 1960 to 1970 are taken from Bowles et al. (1975). Data for the 1970 to 1980 period were created by the author and Balkrishna Kale. Net migration by age is displayed in two forms in this

paper: the absolute number of migrants and the net migration rate. An example can clarify these terms. To compute the absolute number of 20-29 year-old migrants for the period 1970-1980 in a county, we start with the number of 10-19 year-olds living in that county in 1970. The number of deaths expected to occur during 1970-1980 are subtracted from the 10-19 year-old population in 1970, yielding the "expected" number of 20-29 year-olds in 1980, assuming no migration occurred. Subtracting this "expected" population from the actual 1980 population of 20-29 year-olds yields the estimated number of net migrants. Dividing the number of net migrants by the expected population gives us the net migration rate.

State Migration

Total net migration for Wisconsin is negligible for the last two decades. About 600 more people moved into the state than moved out during the 1960s, and during the 1970s, about 9,000 moved in on balance. This is a good example of the apparently strange results that 'net' migration measures yield. From the 1970 Census, it is known that slightly more than 300,000 people moved into the state, and a little less than 300,000 people moved out of the state between 1965 and 1970. Looking at the net change in population due to migration, shown on the top lines of Tables 1 and 2, however, there is still some information to be gained from examining net migration at the state level. From 1970 to 1980 (Table 2), Wisconsin gained 38,000 migrants under age 20. There was net outmigration of the next two age groups, 20-24 and 25-29, of about 20,000 and 27,000

respectively, at rates of -4.3 and -6.3 percent. There was net immigration of over 14,000 people aged 30-34, for a rate of 4.3 percent, and net immigration of 31,000 people under age 14, who are at the age to be children of the 30-34 year-olds. Other than these age groups, the net effects of migration at the state level are small. Patterns in the 1960s were nearly the same, except fewer 30-34 year-olds moved in, and fewer 25-29 year-olds moved out on balance.

Reasons for migration patterns at the state level can be rationally arrived at, but they are still speculative, since we are analyzing the net result of thousands of people moving in and out of the state, and only finding the few thousand who represent the net difference. One group that can be distinguished in these state patterns is the 30-34 year-old male immigrants of the 1970s. In Table 3, which shows net migration by age and sex, we see that there are 19,000 male immigrants and 4,000 female outmigrants on balance. This pattern is due to the Viet Nam war demobilization which occurred during the early 1970s. Thousands of Wisconsin males were in the military in 1970 when they were 20-24 years old, and were therefore not found in the state when the census was taken. By 1980, when they were 30-34, many of them had moved back into the state, creating the seemingly anomalous imbalance of male and female migrants at this age. Higher rates of migration among 30-34 year-olds also occurred in many Wisconsin counties as a result of this phenomenon.

In general, Wisconsin has as many people moving into the state as moving out, although there are variations across age groups. Within the state, however, there are large differences between counties and groups of counties. So let us turn to the counties grouped according to their characteristics and see how they differ.

County Groups

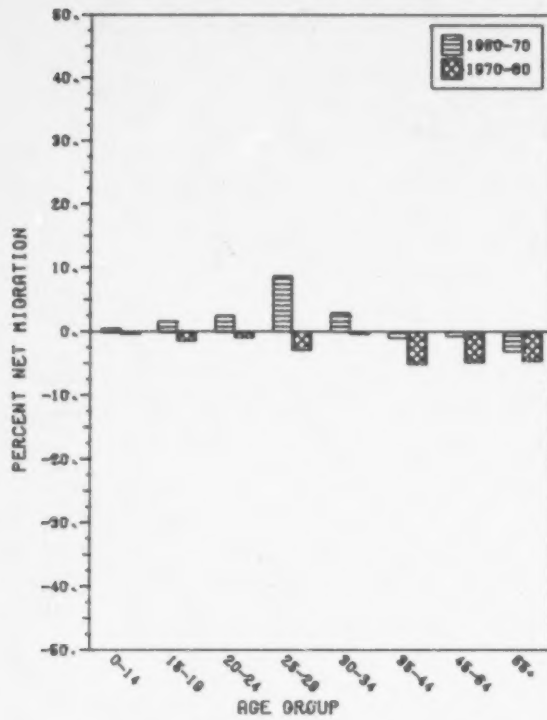
The broadest grouping of counties is according to metropolitan status. Metropolitan counties are those designated by the Census Bureau to be part of a Standard Metropolitan Statistical Area (SMSA) in 1980. Other counties are nonmetropolitan. Metropolitan counties are essentially those counties which contain a large city (usually over 50,000 population), or those counties which are suburbs to the big-city counties. Wisconsin has 11 complete SMSAs and portions of two other SMSAs which cross state lines, for a total of 19 metropolitan counties (see Appendix for a list of these counties).

Metropolitan counties

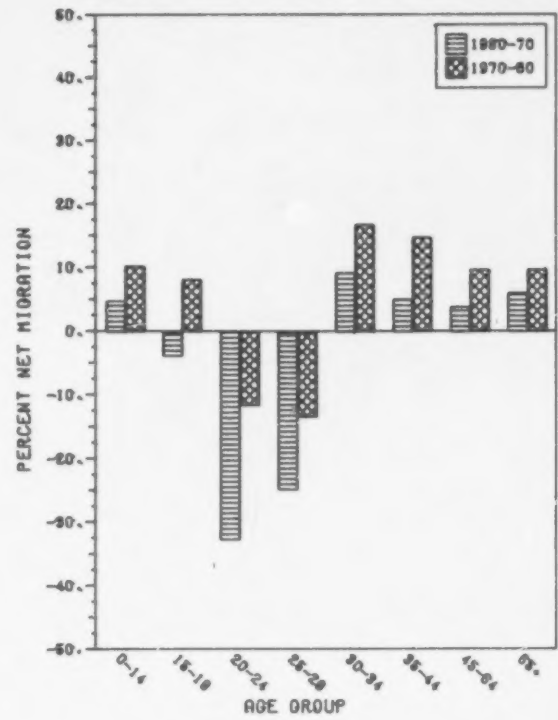
Figure 1 graphs net migration rates in the top panel and the total net migration by age in the bottom panel according to metropolitan status of counties. Table 4 contains the data used in these graphs. In the metropolitan counties during the 1960s, there was slight net immigration for all ages under 35, with the highest rate, nine percent, occurring among 25-29 year-olds. Above 35, outmigration rates and numbers increase with age, peaking at 65 and over. Overall, the metropolitan counties gained about 20,000

FIGURE 1

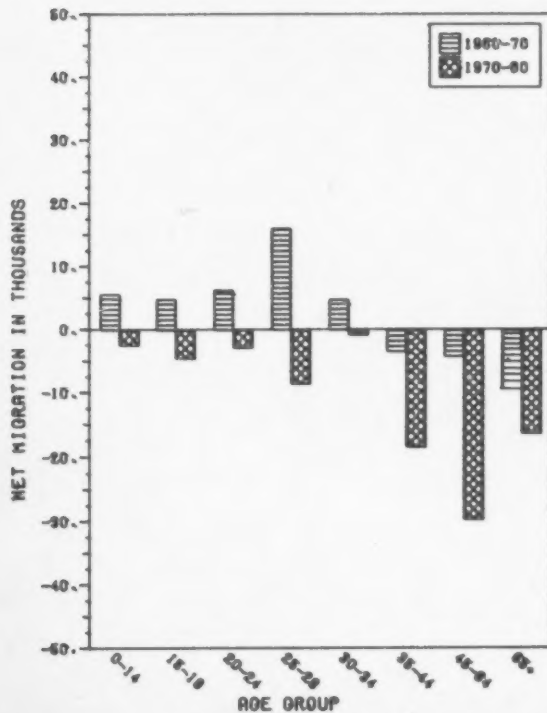
NET MIGRATION BY AGE 1960 TO 1980
WISCONSIN METROPOLITAN COUNTIES



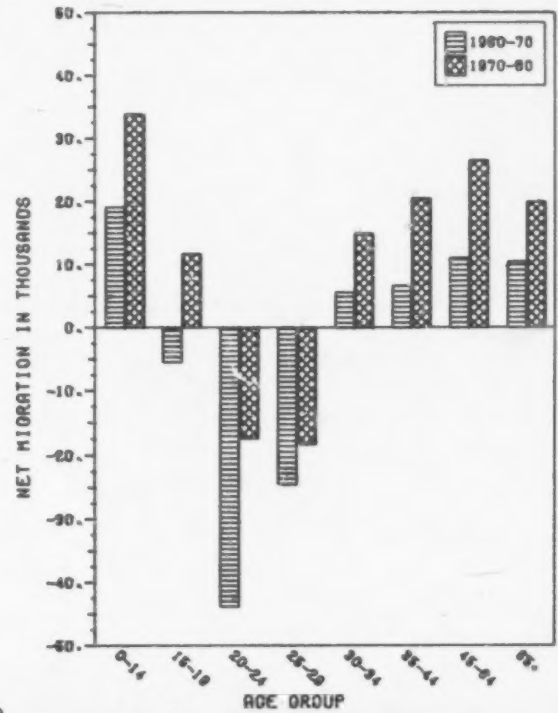
NET MIGRATION BY AGE 1960 TO 1980
WISCONSIN NONMETROPOLITAN COUNTIES



NET MIGRATION BY AGE 1960 TO 1980
WISCONSIN METROPOLITAN COUNTIES



NET MIGRATION BY AGE 1960 TO 1980
WISCONSIN NONMETROPOLITAN COUNTIES



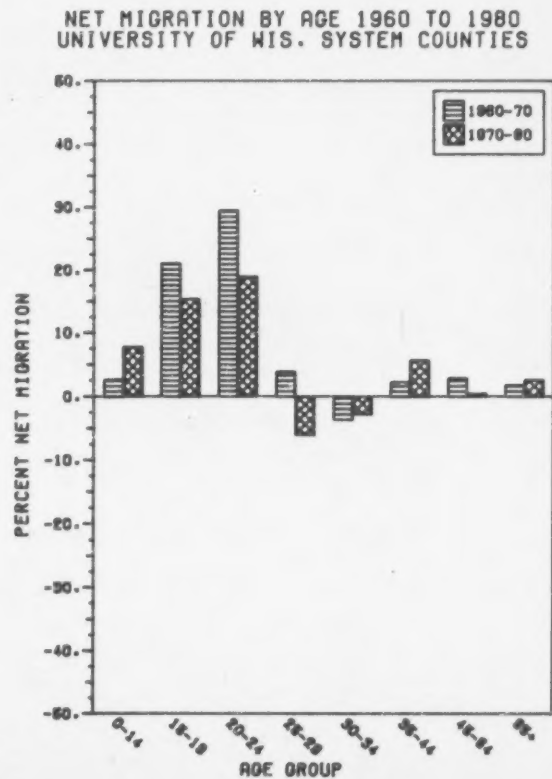
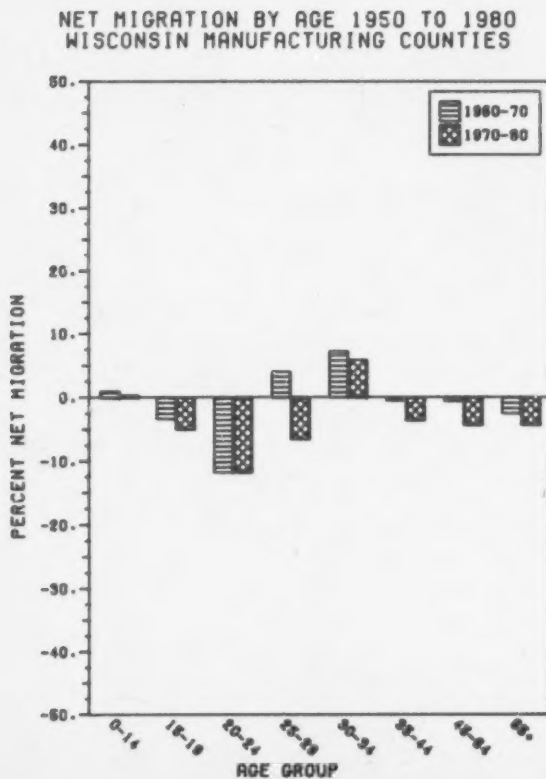
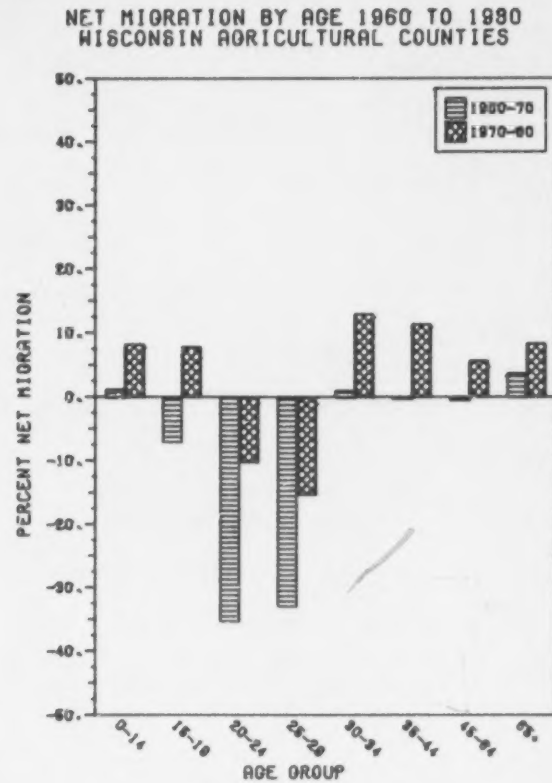
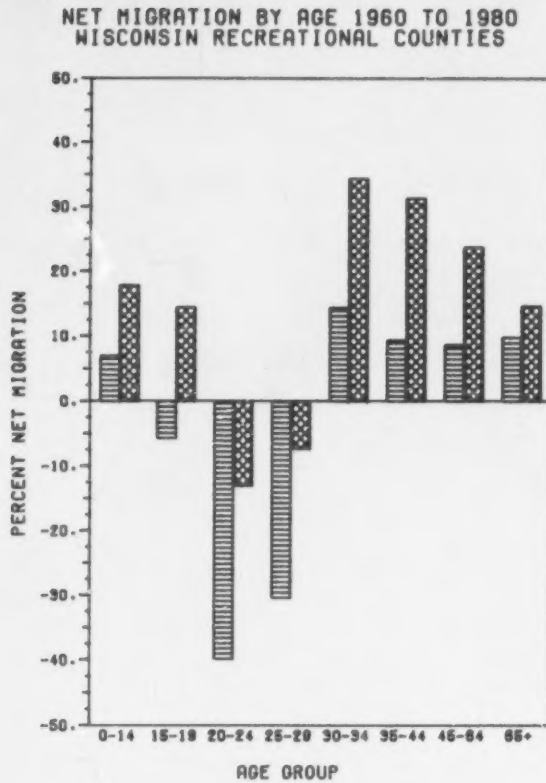
migrants during the 1960s, a negligible amount compared to their size. The 1970s are quite different. A net outmigration from metropolitan counties of over 80,000 people occurred, with every age group showing a loss. Rates and numbers of outmigrants for those in their prime labor-force years (35-64) were particularly high. The 30-34 year-old rate was probably tempered somewhat by the effects of demobilization mentioned above.

Nonmetropolitan counties

Patterns in the nonmetropolitan counties are quite different, with much more extreme rates and numbers of migrants across the age spectrum in both decades, and rapid changes in those patterns. The rapid increases in immigration and decreases in outmigration which occurred across the age spectrum are the source of the "population growth revival" which occurred during the 1970s in these predominantly rural nonmetropolitan counties (see Voss and Fuguitt, 1979; Voss and Rank, 1980). Before 1970, many of these counties had been through decades of virtually no population growth. During the past decade rural counties in Wisconsin, the Upper Great Lakes States, the Ozarks, New England, the Northwest, and elsewhere in the U.S. all had growth rates unprecedented in this century.

Turning to the graphs for the nonmetropolitan counties, the same basic age profile of migration held across both decades. The levels changed drastically, however. The highest rates of outmigration occurred at the age that young people graduate from high school and depart in search of further schooling or for employment. It is

FIGURE 2



clear from the graphs that the ability of rural Wisconsin counties to retain their youth and attract immigrants has increased over the past 20 years. At all other ages, patterns of increased immigration across the two decades are obvious. Total net migration for the nonmetropolitan counties changed from a loss of 84,000 in the 1960s to a gain of 92,000 in the 1970s. According to the graphs, there was much immigration among the retirement and near-retirement age groups, and also among younger and middle-aged adults along with their school-age children. These patterns confirm those presented in a great body of research into the rural revival. Nationwide and in Wisconsin, the rural revival was most apparent in recreational counties, so let us consider them next.

Recreational and agricultural counties

Figure 2 shows net migration rates for recreational, agricultural, manufacturing, and University of Wisconsin System campus counties. Actual rates and numbers of migrants for these counties are shown in Table 4. Lists of these counties are in the Appendix. For purposes of this analysis recreational counties are defined as those counties in which 20 percent or more of the housing stock was recreational housing in the 1970 census (see Tordella, 1977).

Evidence of the population growth revival is strongest in the recreational counties. Across all age groups experiencing immigration, rates were doubled or tripled from the 1960s to the 1970s, and among ages experiencing outmigration, that outmigration

was reduced to rates which were one-third of their former magnitude (see Figure 2). The number of net migrants in each group experiencing net immigration doubled or tripled, while the numbers of outmigrants were attenuated drastically (Table 4). The result was that, overall, the recreational counties lost only 200 people in the 1960s due to net migration, and in the 1970s they gained 53,000, which was over half of the net immigration for all nonmetropolitan counties.

Another important rural county group is the agricultural counties. For analytic purposes, agricultural counties are defined here as those having over 20 percent of their labor force employed in agriculture in 1970. It is possible to define agricultural counties in many ways, for example, by the dollar value of products. The labor force measure is used to ensure that counties where agriculture is a dominant force are included, because it is these counties which have had the most depopulation due to outmigration during this century. The agricultural counties are listed in the Appendix, and they essentially cover the corn belt counties of the southwest, and the dairy belt of the west-central areas of the state.

Turning again to Figure 2 for the graph of migration rates for the agricultural counties, a surprising finding is immediately obvious: the effects of the population growth turnaround extend beyond the recreational counties into the agricultural counties in the 1970s. The age profiles of migration in the agricultural and recreational counties in the 1970s are remarkably similar, with

immigration occurring among the elderly, the middle-aged and their children, and outmigration among those about to enter the labor force or college. Also similar is the attenuation of the extent of outmigration of these young people between the 1960s and 1970s. Overall, the agricultural counties changed from a loss of 23,000 migrants in the 1960s to a gain of 18,000 migrants in the 1970s. The 1970s were probably the first time these counties had gained in terms of migration in many decades.

Having considered major groupings of rural counties, we shall now turn to a dominant force among the metropolitan counties, the manufacturing counties.

Manufacturing counties

Manufacturing counties are defined here as those counties with more than 30 percent of their labor force employed in manufacturing in 1970. This group includes almost all counties east of Dane County, plus some northeast and north-central counties with strong logging-related manufacturing industries. Some of these counties are nonmetropolitan, however, the numeric dominance of the large counties of the southeast causes the smaller counties to be "lost in the wash" of the analysis.

Patterns of population decline due to outmigration are clear in both the 1960s and the 1970s as shown in Figure 2. Outmigration from manufacturing counties occurs in all age groups except 0-14, 25-29, and 30-34 year-olds during the 1960s, and it occurs in all age groups but 0-14 and 30-34 year-olds during the 1970s. Again,

the post-Viet Nam demobilization has some influence on rates for this age group. The manufacturing counties lost 22,000 net migrants in the 1960s and 103,000 in the 1970s (Table 4). Thus, although the rates look small by comparison with those of the other county groups, small loss rates can represent a substantial number of people in counties with very large populations. As with the nonmetropolitan counties, migration patterns are the cause of the broader observed changes in population. In the case of the manufacturing counties, however, the change is toward slower growth and, in some cases, actual population decline.

University of Wisconsin counties

The University of Wisconsin counties are those which contain a four-year UW System campus (excluding Milwaukee County which is so large that it would dominate the analysis). Their migration pattern in Figure 2 is the opposite of most others in that they are gaining youthful migrants. Rates of gain are lower in the 1970s than in the 1960s, however. This is due to the college enrollment of the first of the very large baby-boom age cohorts during the 1960s, causing unprecedented growth in enrollment. While enrollments from 1970 to the present have continued to break records almost every year, the changes do not represent the same large proportionate change that occurred between 1960 and 1970. Another pattern noticeable in the UW graph is the change from positive to negative net migration of 25-29 year-olds between the decades. This is the age at which the oldest student cohort cycles out of the UW county. Since there were

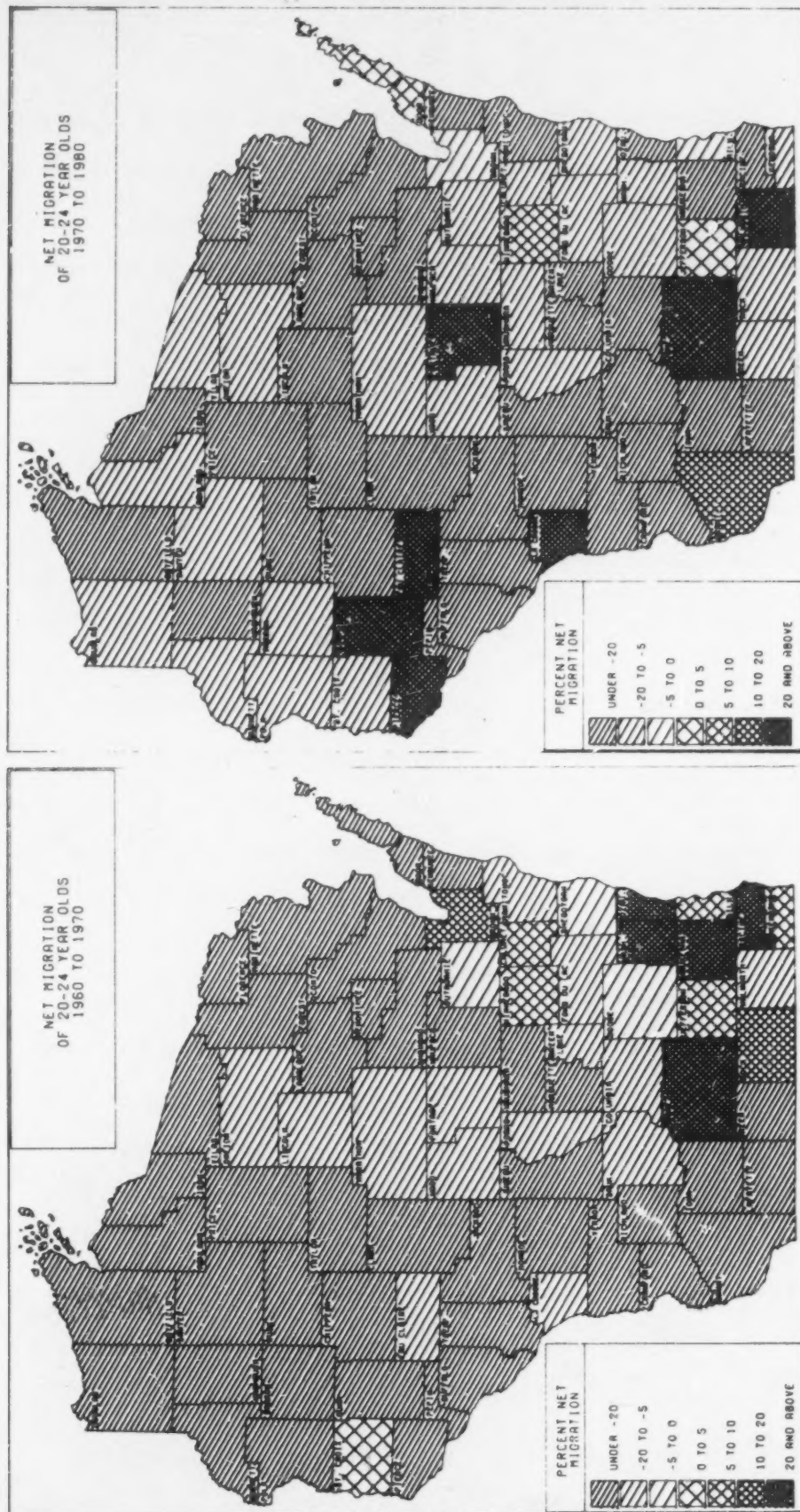
relatively few students in school in 1960 compared to 1970, overall growth of UW campuses caused net immigration at this age. By 1970 large student cohorts were present in all college counties, so a comparison of 1970 with 1980 populations to compute net migration rates for those 15-19 in 1970 becoming 25-29 in 1980 resulted in the net outmigration rates which represent students completing their in- and outmigration cycle.

The college ages are ones of stark contrasts among counties for migration rates, so it is appropriate that we turn now to maps of county migration rates.

County migration maps

Figure 3 shows the net migration rates for 20-24 year-olds from 1970 to 1980. These rates are based on people who were 10-14 years old in 1970 and became 20-24 by 1980, passing through the ages when one graduates from high school and generally searches for more education or a job. This leads many away from their home counties, as was mentioned above. In Figure 3, it is obvious that the very rural counties are still losing the highest proportion of their youth, as they fall in the "under 20 percent" category denoted by closely spaced diagonal lines. What is surprising about this map, however, is the degree of attenuation of outmigration of youth that has occurred in rural Wisconsin. This same map for the 1950s (see Tordella, 1977) would show most of the rural counties losing 30 to 60 percent of their youth, a pattern that has been progressively eroded. With each ensuing decade, rural Wisconsin counties have

Figure 3



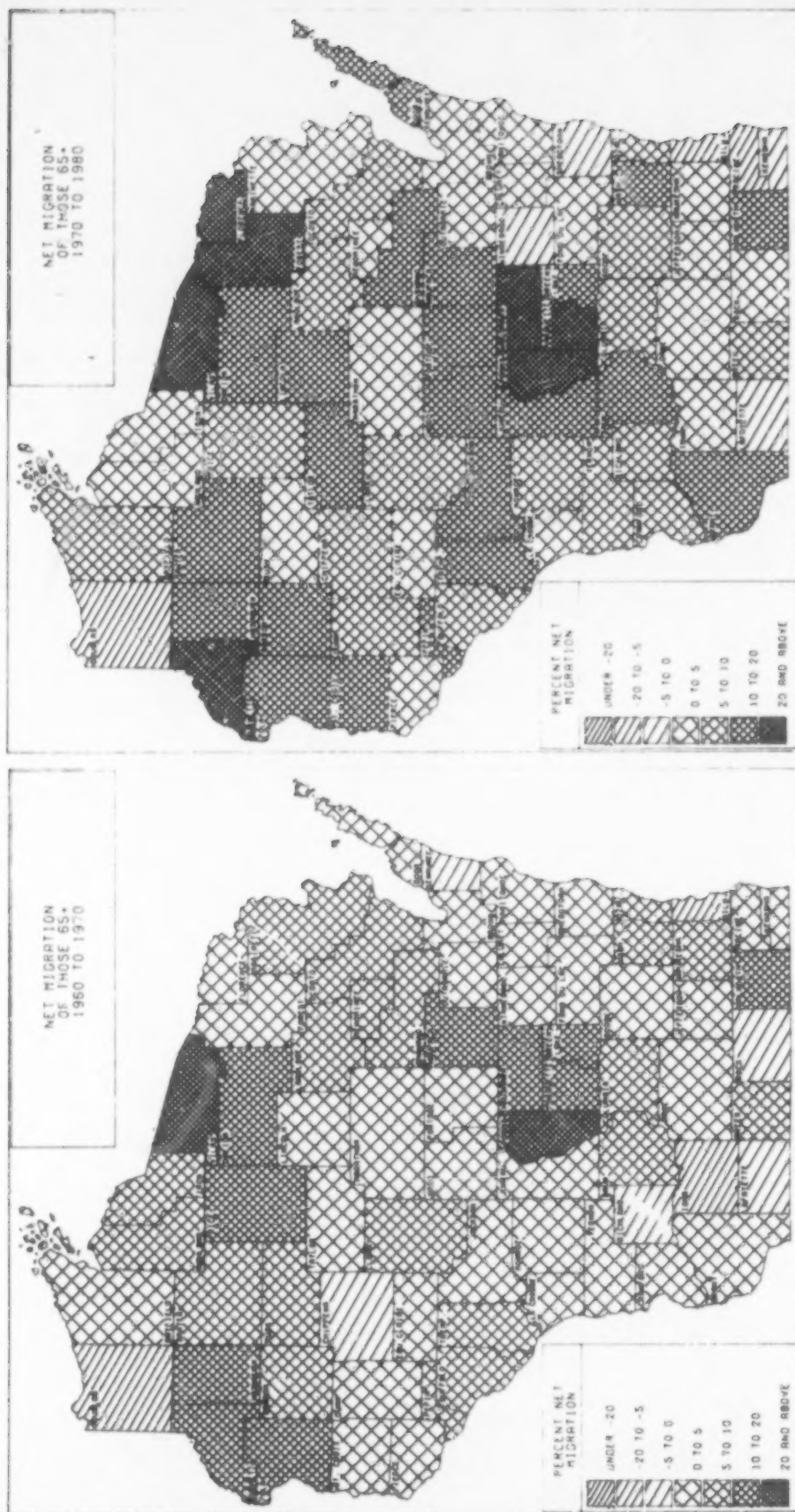
either retained, or on balance attracted, more young people, thus reducing their high outmigration rates.

Of the 11 counties showing immigration of 20-24 year-olds during the 1970s, all but Door have a UW System campus. This pattern is the same as it was in the 1960s, however in the 1950s the counties attracting 20-24 year-olds were generally the big-city counties (see Tordella, 1977). In the 1950s, campuses of the not-yet-formed UW System did not have nearly the dominant effect on their counties they would attain later, with the exception of Madison.

The elderly

Those 65 and over are another key age group because the turnaround is made up of many who are retiring (Voss and Fuguitt, 1979; Voss and Rank, 1980). Figure 4 contains county migration maps for the elderly during the 1960s and the 1970s. In the 1960s, eight counties were losing elderly due to net outmigration. Only two counties gained more than 20 percent due to immigration, Adams in the central sands along the Wisconsin River, and Vilas in the lake country on the northern border. Eleven other central and northern recreational counties joined Adams and Vilas in foreshadowing the turnaround, with immigration rates of 10 to 20 percent. During the 1970s, seven counties in central and northern Wisconsin gained over 20 percent in elderly net migration, and another 22 counties had 10 to 20 percent gains. A comparison of the two maps shows an obvious blooming of the turnaround in terms of elderly migration between the two decades. If the map for the 1950s were to be shown (Tordella,

Figure 4



1977) it would compare to the 1960s map in the same manner as the 1960s map compares with that of the 1970s. That is, it would show lower rates of immigration and more counties experiencing outmigration than in the 1960s. However, the same central and northern counties attracted elderly during both the 1950s and the 1970s. In short, dispersal of immigration of elderly has been a steady process over the last 30 years.

45 to 64 year-olds

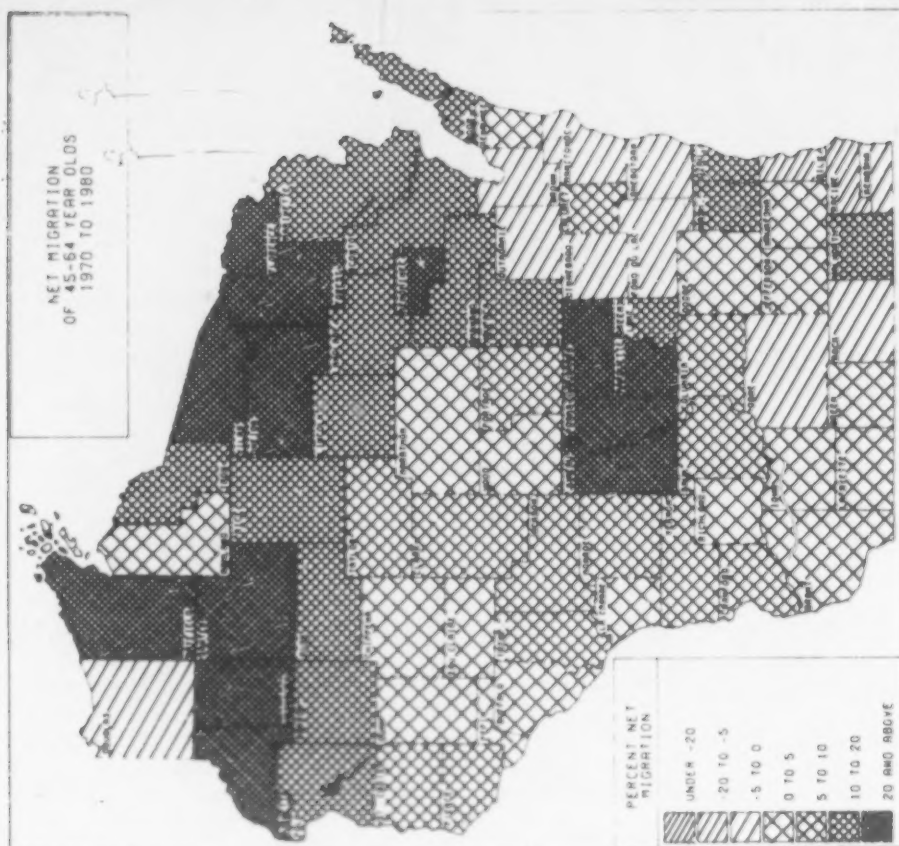
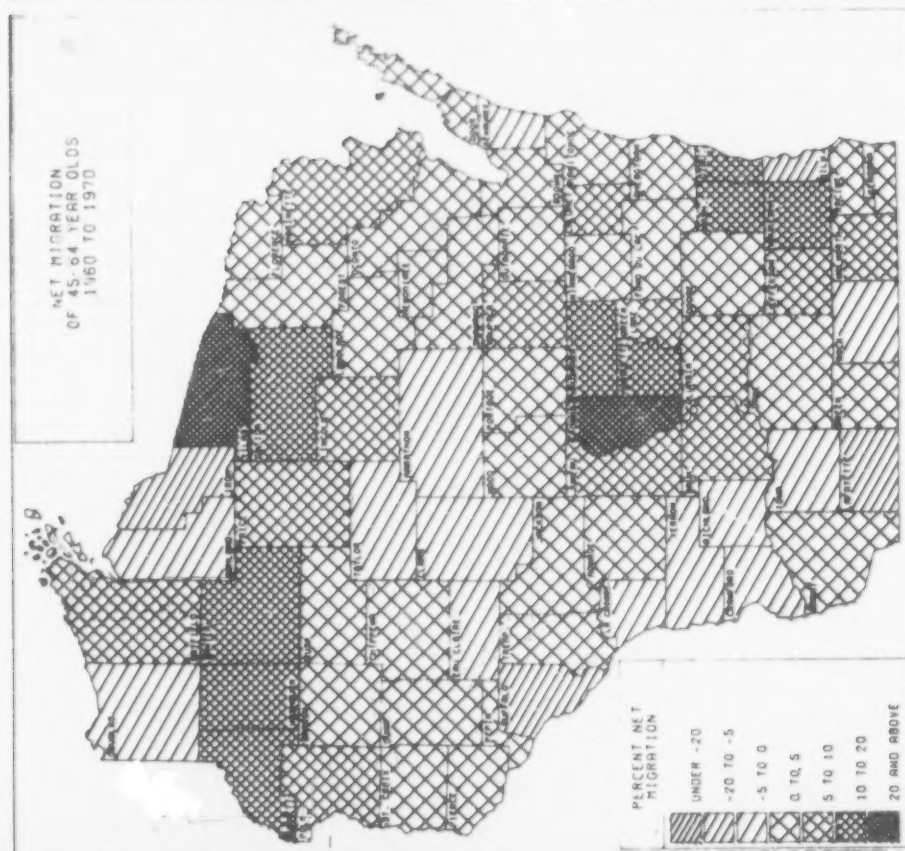
Along with the elderly in many modern retirement streams go the incipient elderly. In fact, for many counties the nearly elderly migrants outnumber those who are over age 65. These people are generally defined as being age 50 or 55 and over, however, data processing exigencies limit us to a consideration of those 45 to 64 years old. County migration rates for this group over the last two decades are shown in Figure 5.

These patterns are very much like those of the 65 and over group, with high rates in Adams and Vilas Counties in the 1960s, followed by more dispersed growth across many of the recreational counties in the 1970s. Another pattern to note on the 1970s map is the loss of 45-64 year-olds by the major metropolitan counties. This pattern of outmigration occurred only in Milwaukee during the 1960s, and spread to nine other metropolitan counties in the 1970s.

Absolute migration levels

The numeric extent of net migration is important for every local

Figure 5



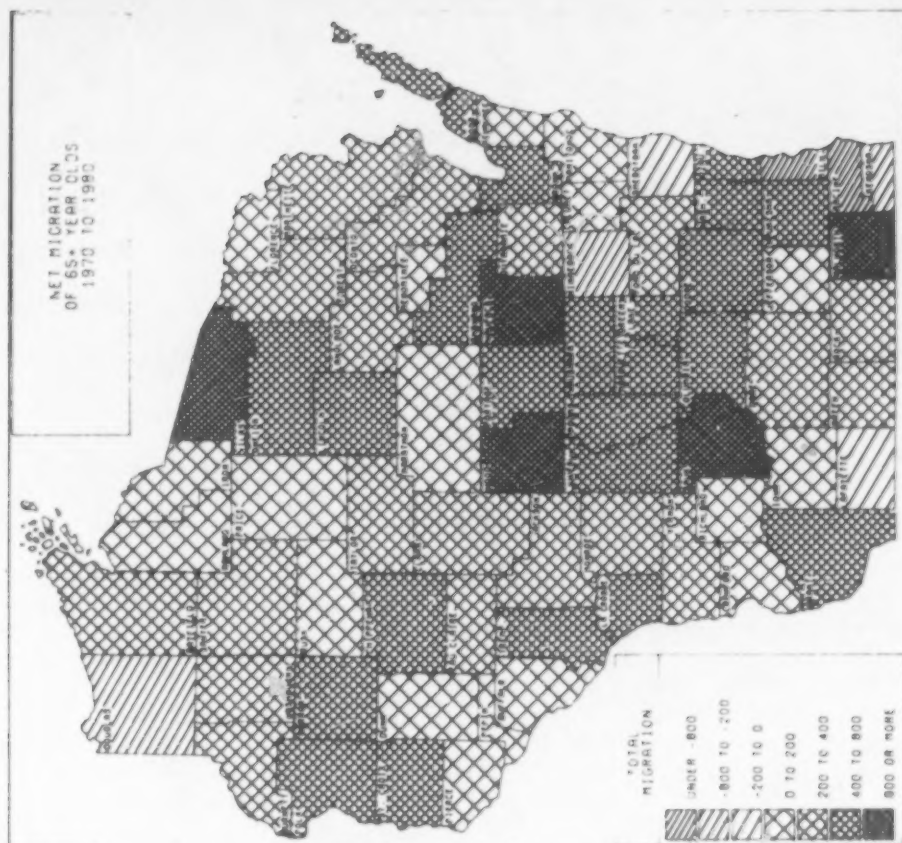
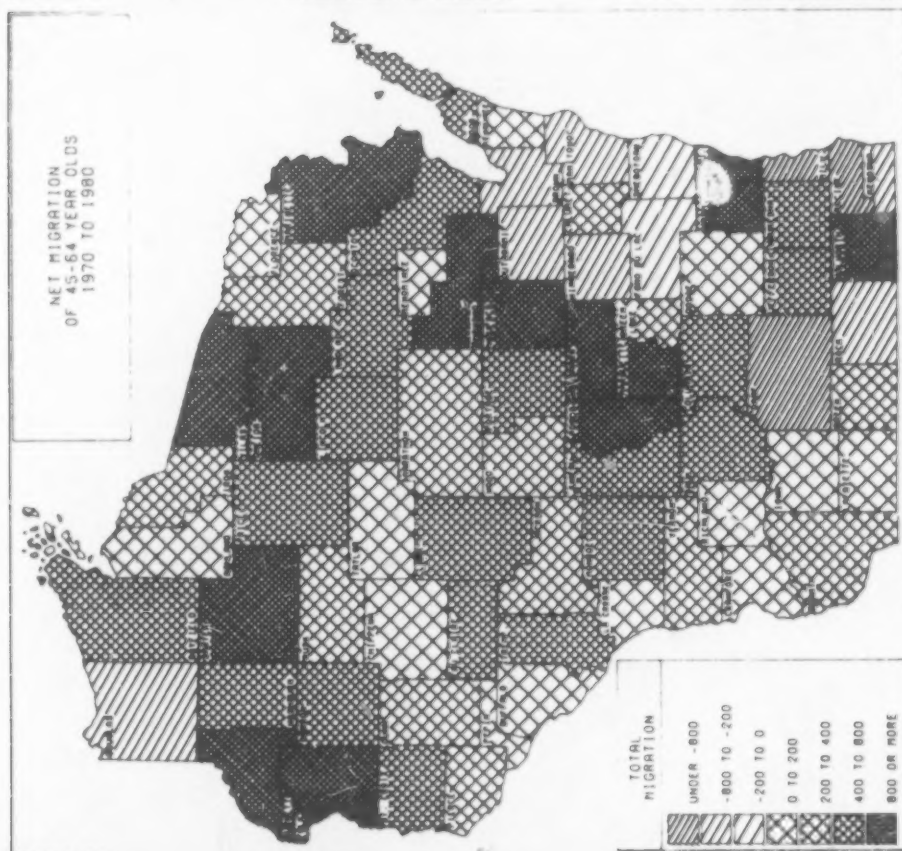
area, because it represents the net change in the population which may need services such as schools, health care, meal delivery, or nursing homes. Absolute net migration levels are shown in the tables for every age group and, in addition, Figure 6 presents the number of net migrants of ages 45 to 64 and 65 and over during the 1970s. It is clear that the rapidly growing recreational counties of central and northern Wisconsin and the suburbs of Milwaukee are gaining migrants who may someday need extended services. It is also clear that increases in elderly and other older adults are dispersed across most of the state's counties.

Conclusion

This examination of migration between 1960 and 1980 has confirmed some existing findings and uncovered some new patterns in Wisconsin migration. First, the population turnaround in many of Wisconsin's rural counties is due to immigration of elderly, older adults, and their children. Young adults continue to move out on balance, but at lower rates than previously. Turnaround migration is concentrated in recreational areas. This confirms previous findings and continues trends which have roots as far back as the 1950s. A new finding in this area is the extension of the turnaround to predominantly agricultural counties, which had traditionally been the most affected by outmigration.

A second new finding is that the metropolitan and industrial counties are losing population due to net migration at all ages, especially among people in the prime working years and older.

Figure 6



Third, while elderly migration rates were known for the 1970-1975 period, this represents the first estimation of near-elderly and elderly migration for 1970 to 1980. Many non-metropolitan counties experienced substantial growth of elderly and near-elderly due to migration. These patterns are important for their service implications, and also because larger age cohorts are approaching retirement ages, which could enlarge this migration stream.

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APPENDIX

Metropolitan Counties (19)

Brown
Calumet
Chippewa
Dane
Douglas
Eau Claire
Kenosha
La Crosse
Marathon
Milwaukee
Outagamie
Ozaukee
Racine
Rock
St. Croix
Sheboygan
Washington
Waukesha
Winnebago

Nonmetropolitan Counties

All 53 counties that are
not metropolitan.

Recreational Counties (20)

Adams
Bayfield
Burnett
Door
Florence
Forest
Iron
Langlade
Lincoln
Marinette
Marquette
Menominee
Oconto
Oneida
Polk
Sawyer
Vilas
Walworth
Washburn
Waushara

Agricultural Counties (15)

Buffalo
Clark
Crawford
Green
Iowa
Jackson
La Crosse
Lafayette
Pepin
Polk
Richland
Shawano
Taylor
Trempealeau
Vernon

Manufacturing Counties (24)

Calumet
Dodge
Fond du Lac
Forest
Jefferson
Kenosha
Kewaunee
Lincoln
Manitowoc
Marathon
Marinette
Menominee
Milwaukee
Oconto
Outagamie
Ozaukee
Price
Racine
Rock
Sheboygan
Washington
Waukesha
Winnebago
Wood

APPENDIX, continued

University of Wisconsin System Counties (13)

Brown
Dane
Douglas
Dunn
Eau Claire
Grant
Jefferson
Kenosha
La Crosse
Pierce
Portage
Walworth
Winnebago

TABLE 1

Net Migration by Age for Wisconsin Counties, 1960-1970

	AGE GROUPS							
	0-14	15-19	20-24	25-29	30-34	35-44	45-64	65+
WISCONSIN								
Net Migration	24904	-565	-37435	-8272	10536	3254	6901	1308
Rate	1.9	-0.1	-10.0	-2.9	4.7	0.7	0.8	0.3
ADAMS								
Net Migration	607	90	-267	-102	95	271	525	272
Rate	30.6	13.0	-38.6	-19.4	29.3	42.4	31.9	22.0
ASHLAND								
Net Migration	10	-50	-601	-694	-191	-23	-46	151
Rate	0.2	-2.8	-34.8	-48.0	-21.9	-1.5	-1.2	6.1
BARRON								
Net Migration	113	-469	-1839	-939	137	17	158	366
Rate	1.2	-12.0	-51.1	-35.8	10.4	0.5	2.1	7.9
BAYFIELD								
Net Migration	314	-183	-697	-367	35	97	243	35
Rate	10.8	-15.2	-55.0	-39.8	8.0	10.9	8.7	1.9
BROWN								
Net Migration	3625	998	-10	1122	1549	1318	1144	420
Rate	7.3	6.4	-0.1	11.9	21.2	8.7	4.4	3.4
BUFFALO								
Net Migration	-85	-326	-793	-385	23	-39	-153	110
Rate	-2.0	-20.6	-51.4	-36.0	3.6	-2.7	-5.0	5.9
BURNETT								
Net Migration	175	-135	-598	-295	40	147	360	280
Rate	8.1	-15.0	-61.4	-41.7	11.8	20.4	18.1	18.6
CALUMET								
Net Migration	1099	-102	-614	136	305	257	249	59
Rate	12.5	-3.5	-26.3	8.7	26.0	10.1	5.4	2.5
CHIPPEWA								
Net Migration	745	-574	-2027	-956	135	-16	57	-22
Rate	5.1	-10.8	-39.6	-27.0	6.0	-0.3	0.6	-0.4
CLARK								
Net Migration	189	-815	-2283	-1064	136	-32	-184	216
Rate	2.0	-22.3	-63.0	-43.0	11.2	-1.1	-2.7	5.2
COLUMBIA								
Net Migration	993	-290	-1210	-321	412	413	451	373
Rate	9.2	-7.3	-34.5	-12.6	24.1	10.7	5.8	7.2
CRAWFORD								
Net Migration	-99	-468	-1111	-604	-2	-75	-101	34
Rate	-2.1	-24.0	-61.2	-44.8	-0.3	-4.7	-2.9	1.6
DANE								
Net Migration	-945	7770	19408	6171	-3788	-1445	1515	115
Rate	-1.1	32.6	99.9	33.3	-18.4	-4.7	3.4	0.5
DODGE								
Net Migration	1462	-642	-1858	-177	748	60	-6	212
Rate	7.6	-9.4	-30.0	-4.2	24.0	0.8	0.0	2.7
DOOR								
Net Migration	96	-326	-1057	-642	35	36	131	126
Rate	1.8	-15.2	-49.2	-40.4	4.0	1.9	2.7	4.4
DOUGLAS								
Net Migration	-229	75	-457	-971	-373	-119	-70	-523
Rate	-1.9	1.7	-11.0	-28.7	-15.3	-2.7	-0.7	-8.6
DUNN								
Net Migration	95	1083	952	-798	-483	2	39	83
Rate	1.4	39.6	34.9	-33.1	-29.6	0.1	0.7	2.3

Table 1, continued.

	AGE GROUPS							
	0-14	15-19	20-24	25-29	30-34	35-44	45-64	65+
EAU CLAIRE								
Net Migration	107	1986	1399	-637	-116	168	-46	118
Rate	0.6	30.5	23.6	-14.1	-3.7	2.7	-0.3	1.7
FLORENCE								
Net Migration	91	-84	-197	-103	49	-17	7	6
Rate	9.8	-23.4	-56.1	-45.0	40.8	-4.8	0.9	1.3
FOND DU LAC								
Net Migration	1239	585	-1089	-428	375	391	281	206
Rate	5.1	6.9	-15.0	-7.8	9.9	4.7	1.8	2.2
FOREST								
Net Migration	198	43	-557	-253	66	105	66	30
Rate	9.3	5.2	-61.8	-42.7	24.1	17.5	4.0	2.9
GRANT								
Net Migration	-179	595	54	-1135	-577	-65	188	233
Rate	-1.2	11.8	1.2	-31.4	-20.4	-1.4	2.2	4.2
GREEN								
Net Migration	251	-336	-951	-357	111	25	30	209
Rate	3.4	-12.2	-37.1	-20.2	8.7	0.9	0.5	6.0
GREEN LAKE								
Net Migration	307	-116	-347	-72	48	234	239	241
Rate	7.2	-7.7	-24.9	-7.2	6.8	15.2	6.5	10.7
IOWA								
Net Migration	-50	-496	-880	-417	13	14	-125	-154
Rate	-0.8	-21.1	-44.1	-31.1	1.5	0.7	-3.2	-5.9
IRON								
Net Migration	-1	-172	-433	-340	-22	-52	-202	90
Rate	-0.1	-23.1	-58.7	-59.5	-7.9	-7.5	-10.0	8.3
JACKSON								
Net Migration	427	-144	-824	-415	140	100	127	71
Rate	10.7	-8.7	-51.3	-35.3	24.8	7.2	3.7	3.5
JEFFERSON								
Net Migration	1848	1260	-126	300	650	643	845	282
Rate	12.3	24.6	-2.6	8.7	25.0	11.8	7.6	4.1
JUNEAU								
Net Migration	622	-189	-807	-430	203	248	258	100
Rate	12.8	-10.1	-44.8	-32.3	28.4	15.1	7.0	3.9
KENOSHA								
Net Migration	586	159	-950	583	647	369	642	77
Rate	1.6	1.5	-10.1	8.2	10.6	3.0	2.8	0.7
KEWAUNEE								
Net Migration	300	-217	-864	-402	31	32	-18	-22
Rate	5.3	-9.9	-42.4	-28.5	3.7	1.8	-0.5	-1.0
LA CROSSE								
Net Migration	-207	1448	630	-1093	-243	-192	-97	241
Rate	-0.9	18.2	9.1	-19.0	-5.8	-2.3	-0.6	2.7
LAFAYETTE								
Net Migration	-91	-343	-953	-508	-46	-67	-231	-13
Rate	-1.6	-16.7	-50.5	-39.3	-5.2	-3.5	-6.3	-0.6
LANGLADE								
Net Migration	-363	-448	-1218	-662	-37	-16	101	189
Rate	-5.8	-19.1	-55.6	-43.0	-4.2	-0.9	2.5	7.2
LINCOLN								
Net Migration	184	-202	-865	-291	115	78	243	117
Rate	2.7	-9.1	-41.9	-18.9	10.3	3.2	5.0	3.8

Table 1, continued.

	AGE GROUPS							
	0-14	15-19	20-24	25-29	30-34	35-44	45-64	65+
MANITOWOC								
Net Migration	721	-708	-2153	-579	272	92	366	249
Rate	2.9	-8.2	-28.8	-11.0	7.2	1.1	2.2	2.7
MARATHON								
Net Migration	1413	-828	-3174	-848	675	234	-127	104
Rate	4.8	-7.9	-34.0	-12.3	14.8	2.3	-0.6	1.1
MARINETTE								
Net Migration	674	-451	-1799	-769	232	221	558	473
Rate	7.1	-12.1	-49.1	-29.5	16.7	7.1	7.1	9.9
MARQUETTE								
Net Migration	196	-64	-383	-192	102	103	275	207
Rate	9.2	-7.7	-52.2	-34.3	32.2	13.1	15.2	14.1
MILWAUKEE								
Net Migration	-41650	-10066	1218	4509	-9600	-21462	-16853	-11785
Rate	-12.4	-9.6	1.4	6.8	-14.7	-15.6	-7.0	-9.6
MONROE								
Net Migration	201	-692	-1867	-712	241	133	165	158
Rate	2.2	-19.1	-51.9	-30.5	20.6	4.2	2.4	3.8
OCO-MENO-SHA								
Net Migration	962	-1027	-3158	-1884	416	344	586	514
Rate	5.4	-15.6	-51.3	-39.3	17.3	6.3	4.4	6.6
ONEIDA								
Net Migration	359	-259	-1087	-295	249	307	920	416
Rate	5.3	-10.3	-49.3	-19.4	26.6	13.6	18.8	15.0
OUTAGAMIE								
Net Migration	612	-612	-1701	-282	498	237	2	177
Rate	1.5	-4.7	-15.9	-3.6	8.2	1.9	0.0	1.8
OZAUKEE								
Net Migration	4491	215	-821	912	1568	2011	1200	288
Rate	31.8	4.3	-21.5	37.9	85.4	40.3	13.7	7.9
PEPIN								
Net Migration	188	-160	-380	-299	-6	7	13	76
Rate	8.5	-19.5	-48.7	-50.1	-1.8	1.1	0.9	7.4
PIERCE								
Net Migration	471	859	452	-390	-177	172	178	130
Rate	6.5	35.0	19.1	-20.6	-12.3	7.7	4.0	4.5
POLK								
Net Migration	705	-287	-1231	-613	281	271	347	375
Rate	10.1	-10.8	-45.7	-31.6	28.2	11.8	6.2	10.4
PORTAGE								
Net Migration	960	2580	1819	-466	-54	371	310	0
Rate	7.6	62.3	48.4	-14.3	-2.3	9.6	4.0	0.0
PRICE								
Net Migration	308	-276	-806	-383	114	65	296	239
Rate	8.1	-18.4	-55.3	-37.9	22.3	5.0	9.2	11.2
RACINE								
Net Migration	4812	-342	-1741	1841	1884	1124	666	53
Rate	9.5	-2.1	-12.9	20.0	23.8	6.2	2.1	0.3
RICHLAND								
Net Migration	57	-238	-940	-574	106	-46	-39	-13
Rate	1.2	-11.7	-49.9	-42.4	15.7	-2.6	-1.0	-0.5
ROCK								
Net Migration	1955	-249	-881	828	833	543	-187	-438
Rate	4.9	-2.0	-8.4	10.5	11.8	3.8	-0.8	-3.4

Table 1, continued.

	AGE GROUPS							
	0-14	15-19	20-24	25-29	30-34	35-44	45-64	65+
RUSK								
Net Migration	35	-274	-1023	-567	52	-1	22	149
Rate	0.8	-16.1	-59.0	-47.1	10.0	-0.1	0.7	8.0
ST. CROIX								
Net Migration	1041	-290	-819	17	455	440	199	123
Rate	9.9	-8.2	-27.3	0.8	31.2	13.5	3.4	3.5
SAUK								
Net Migration	599	-377	-1331	-334	363	397	490	290
Rate	5.5	-9.6	-36.0	-13.1	23.7	11.0	6.3	5.9
SAWYER								
Net Migration	131	-109	-541	-282	57	130	377	145
Rate	5.2	-11.8	-59.5	-39.5	16.7	17.0	17.6	9.9
SHEBOYGAN								
Net Migration	2105	56	-1515	-4	667	536	634	104
Rate	8.1	0.6	-18.9	-0.1	15.5	5.6	3.2	0.9
TAYLOR								
Net Migration	-145	-465	-1284	-755	0	-107	-100	80
Rate	-2.5	-21.2	-61.7	-51.4	0.0	-6.1	-2.8	4.0
TREMPEALEAU								
Net Migration	209	-330	-1213	-554	107	28	79	240
Rate	3.2	-14.1	-51.2	-31.7	11.1	1.3	1.5	7.0
VERNON								
Net Migration	263	-571	-1556	-728	154	89	-52	172
Rate	4.0	-20.8	-57.3	-38.9	15.7	3.7	-0.9	4.7
VILAS								
Net Migration	531	-78	-418	-146	127	277	772	382
Rate	22.8	-8.5	-48.2	-23.2	35.7	34.3	36.3	25.8
WALWORTH								
Net Migration	1392	1657	1344	-398	144	630	827	684
Rate	8.7	30.0	27.4	-9.8	4.7	11.2	7.3	10.2
WASHBURN								
Net Migration	363	-87	-580	-285	87	69	365	192
Rate	14.5	-8.3	-55.9	-36.2	22.6	7.7	16.0	12.5
WASHINGTON								
Net Migration	4056	176	-619	1296	1527	1578	1167	407
Rate	22.2	3.1	-13.5	43.0	60.7	27.7	11.9	8.4
WAUKESHA								
Net Migration	20748	2996	-3408	2825	7661	10203	5082	1080
Rate	35.6	14.9	-21.5	26.4	104.6	47.4	13.9	7.9
WAUPACA								
Net Migration	966	-375	-1478	-541	286	326	607	1023
Rate	10.4	-10.3	-43.1	-21.6	19.9	10.0	7.7	18.6
WAUSHARA								
Net Migration	493	-11	-511	-221	165	177	434	360
Rate	14.2	-0.9	-40.1	-23.2	31.6	14.0	14.6	16.6
WINNEBAGO								
Net Migration	1333	2061	2434	672	539	743	565	151
Rate	3.8	17.0	24.1	8.9	8.6	5.7	2.3	1.2
WOOD								
Net Migration	-85	-904	-2244	-525	291	145	137	175
Rate	-0.4	-12.7	-35.2	-12.1	8.9	2.2	1.1	2.8

TABLE 2

Net Migration by Age for Wisconsin Counties, 1970-80

	AGE GROUPS							
	0-14	15-19	20-24	25-29	30-34	35-44	45-64	65+
WISCONSIN								
Net Migration	31445	7192	-20328	-26890	14225	2084	-3123	3580
Rate	3.0	1.6	-4.3	-6.3	4.3	0.4	-0.3	0.6
ADAMS								
Net Migration	529	292	-82	284	433	602	1246	672
Rate	25.6	32.0	-8.2	36.7	103.1	72.4	67.6	41.1
ASHLAND								
Net Migration	98	57	-215	-457	-101	129	149	75
Rate	2.7	3.5	-13.2	-26.8	-9.1	9.1	4.8	2.7
BARRON								
Net Migration	1158	409	-709	-515	756	755	717	681
Rate	14.7	12.5	-18.6	-15.1	43.3	24.3	10.5	12.6
BAYFIELD								
Net Migration	667	135	-351	-2	382	421	510	203
Rate	26.6	12.5	-28.6	-0.2	67.6	41.4	22.4	9.4
BROWN								
Net Migration	1378	-236	-502	-317	1725	79	-753	485
Rate	3.3	-1.2	-2.8	-1.9	14.1	0.4	-2.5	3.0
BUFFALO								
Net Migration	200	-72	-390	-269	182	95	126	180
Rate	6.3	-5.0	-25.5	-21.7	24.5	7.2	4.7	8.5
BURNETT								
Net Migration	656	225	-138	41	366	446	958	388
Rate	32.0	28.1	-15.4	5.4	98.4	57.1	52.0	20.5
CALUMET								
Net Migration	612	-148	-658	-279	552	174	305	90
Rate	8.0	-4.2	-19.8	-10.1	32.3	5.6	5.9	3.1
CHIPPEWA								
Net Migration	1028	-76	-1342	-521	657	464	149	482
Rate	8.3	-1.4	-24.5	-11.1	21.5	9.5	1.6	7.8
CLARK								
Net Migration	936	-77	-1284	-490	633	470	436	388
Rate	12.4	-2.3	-35.6	-17.5	47.8	17.3	7.4	8.2
COLUMBIA								
Net Migration	842	-57	-1230	-416	851	502	538	512
Rate	9.2	-1.4	-28.0	-11.5	37.5	11.7	6.6	8.8
CRAWFORD								
Net Migration	450	-21	-549	-248	395	246	180	145
Rate	12.3	-1.3	-32.4	-17.0	56.6	17.7	6.0	6.1
DANE								
Net Migration	-2437	4754	17288	6629	-8524	-5491	-1799	247
Rate	-3.6	16.9	62.7	21.2	-22.2	-13.4	-3.4	0.9
DODGE								
Net Migration	1288	-187	-1317	196	1087	374	9	643
Rate	7.9	-2.7	-17.4	3.2	25.3	4.8	0.1	6.9
DOOR								
Net Migration	845	278	88	251	636	654	789	475
Rate	17.9	14.9	4.2	13.9	58.9	35.5	19.3	13.5
DOUGLAS								
Net Migration	-16	95	-270	-797	-486	-139	-217	-442
Rate	-0.2	2.3	-6.0	-17.6	-13.3	-3.2	-2.5	-6.5
DUNN								
Net Migration	641	1853	3037	-1075	-1359	246	238	196
Rate	9.9	77.3	117.4	-28.5	-37.3	9.0	4.7	5.1

Table 2, continued.

	AGE GROUPS							
	0-14	15-19	20-24	25-29	30-34	35-44	45-64	65+
EAU CLAIRE								
Net Migration	1056	3654	4264	-1762	-1309	696	436	287
Rate	6.8	61.3	67.7	-21.0	-18.0	10.2	3.4	3.4
FLORENCE								
Net Migration	251	40	-128	-9	108	139	190	188
Rate	33.9	11.6	-32.8	-3.3	70.6	47.9	28.6	34.9
FOND DU LAC								
Net Migration	688	105	-1160	-1583	331	118	-22	383
Rate	3.3	1.2	-12.7	-17.8	5.4	1.3	-0.1	3.6
FOREST								
Net Migration	246	186	-193	-279	170	209	331	251
Rate	12.8	22.1	-23.3	-32.4	49.8	31.1	23.1	20.5
GRANT								
Net Migration	200	1070	611	-1687	-1284	114	279	708
Rate	1.7	21.2	11.3	-30.2	-29.4	2.4	3.2	11.8
GREEN								
Net Migration	782	-39	-450	72	638	350	232	332
Rate	12.2	-1.4	-15.9	3.0	40.0	12.6	4.2	8.6
GREEN LAKE								
Net Migration	205	21	-321	-97	153	149	367	457
Rate	5.3	1.3	-20.1	-7.1	14.8	8.9	10.5	16.3
IOWA								
Net Migration	304	-215	-812	-323	336	128	15	11
Rate	6.5	-9.7	-34.2	-17.6	30.5	7.3	0.4	0.4
IRON								
Net Migration	160	45	-179	-120	84	118	207	31
Rate	14.2	8.8	-28.1	-21.2	27.8	24.5	14.8	2.3
JACKSON								
Net Migration	320	38	-537	-292	381	285	292	257
Rate	8.9	2.5	-31.2	-19.6	49.2	19.7	9.5	10.5
JEFFERSON								
Net Migration	992	1454	126	-1088	25	449	422	162
Rate	7.0	24.9	2.1	-17.3	0.5	6.5	3.6	2.0
JUNEAU								
Net Migration	528	35	-633	-226	299	363	760	482
Rate	11.8	1.8	-30.8	-13.6	30.4	20.2	20.7	16.9
KENOSHA								
Net Migration	617	-727	-1171	-609	534	-249	-630	-462
Rate	2.2	-5.5	-9.3	-5.5	6.3	-1.7	-2.6	-3.4
KEWAUNEE								
Net Migration	276	-100	-505	-517	116	32	62	95
Rate	5.9	-4.9	-23.4	-26.3	10.0	1.7	1.7	3.6
LA CROSSE								
Net Migration	578	2811	4058	-1174	-952	196	174	449
Rate	3.2	37.5	51.3	-12.6	-12.7	2.3	1.1	4.3
LAFAYETTE								
Net Migration	94	-151	-797	-373	95	89	2	-12
Rate	2.2	-7.6	-35.5	-22.0	10.3	5.6	0.1	-0.5
LANGLADE								
Net Migration	338	-37	-828	-535	238	250	446	204
Rate	7.6	-1.8	-37.5	-28.4	24.7	14.7	12.3	6.7
LINCOLN								
Net Migration	531	326	-603	-167	442	427	546	408
Rate	9.5	13.3	-23.4	-8.4	37.2	17.5	11.5	11.3

Table 2, continued.

	AGE GROUPS							
	0-14	15-19	20-24	25-29	30-34	35-44	45-64	65+
MANITOWOC								
Net Migration	412	-665	-2074	-1301	443	-132	-337	120
Rate	2.2	-7.5	-23.1	-16.5	8.4	-1.5	-2.0	1.1
MARATHON								
Net Migration	2574	404	-1325	64	2172	1293	216	117
Rate	10.1	3.8	-11.9	0.7	35.6	11.6	1.1	1.0
MARINETTE								
Net Migration	1269	120	-814	-427	614	693	814	252
Rate	16.1	3.4	-21.5	-13.1	33.2	20.3	11.6	4.1
MARQUETTE								
Net Migration	554	202	-193	25	319	380	878	460
Rate	28.0	25.6	-20.8	3.3	91.7	49.0	49.7	27.0
MENOMINEE								
Net Migration	73	4	-112	-11	61	69	98	3
Rate	6.5	0.9	-26.9	-4.4	50.0	30.3	24.7	1.3
MILWAUKEE								
Net Migration	-37133	-13858	-3170	-2366	-15105	-30977	-27332	-18528
Rate	-15.3	-13.8	-3.1	-2.5	-17.6	-24.9	-12.2	-13.2
MONROE								
Net Migration	1092	14	-976	-315	754	644	454	318
Rate	14.6	0.4	-27.6	-10.9	44.0	21.5	6.7	7.1
OCONTO								
Net Migration	960	185	-954	-351	640	723	769	215
Rate	15.9	6.9	-31.5	-14.9	50.5	31.6	15.4	5.2
ONEIDA								
Net Migration	1142	409	-448	154	899	1197	1548	737
Rate	20.8	16.4	-16.4	6.9	81.1	50.3	30.0	18.6
OUTAGAMIE								
Net Migration	1190	-472	-2016	-1043	768	157	-473	204
Rate	3.8	-3.3	-14.2	-8.5	8.6	1.1	-2.1	1.6
OZAUCKEE								
Net Migration	3009	146	-1708	-335	2394	2510	1267	458
Rate	22.2	2.2	-25.1	-6.5	80.6	37.8	10.3	8.8
PEPIN								
Net Migration	80	-70	-324	-145	88	54	50	121
Rate	4.6	-8.1	-35.8	-22.2	22.2	8.7	3.9	10.5
PIERCE								
Net Migration	455	1209	1371	-720	-523	339	234	40
Rate	6.7	43.8	51.1	-22.0	-18.7	12.4	5.1	1.3
POLK								
Net Migration	1304	185	-559	173	804	810	963	654
Rate	20.1	6.6	-19.6	7.4	55.6	31.6	18.6	14.9
PORTAGE								
Net Migration	1055	2282	3614	-1601	-1389	588	578	540
Rate	8.8	46.8	80.3	-24.1	-25.2	11.8	7.2	10.4
PRICE								
Net Migration	433	-34	-518	-135	312	313	429	145
Rate	13.0	-2.4	-34.0	-11.2	48.3	25.3	15.0	5.5
RACINE								
Net Migration	424	-2256	-4466	-1380	1616	-891	-2178	-1305
Rate	1.0	-11.6	-22.6	-8.7	13.9	-4.3	-6.2	-6.9
RICHLAND								
Net Migration	219	-84	-486	-376	166	79	145	152
Rate	5.8	-4.9	-26.3	-21.3	17.8	5.1	4.2	5.8
ROCK								
Net Migration	895	-1031	-1871	-725	876	-479	-639	270
Rate	2.7	-6.9	-12.8	-5.9	9.3	-2.9	-2.4	1.8

Table 2, continued.

	AGE GROUPS							
	0-14	15-19	20-24	25-29	30-34	35-44	45-64	65+
RUSK								
Net Migration	456	17	-468	-288	264	232	375	110
Rate	13.5	1.1	-28.3	-20.4	37.5	19.5	13.4	4.9
ST. CROIX								
Net Migration	1632	227	-404	448	1370	1152	488	536
Rate	16.9	5.5	-9.7	14.0	63.3	29.3	7.3	13.8
SAUK								
Net Migration	646	70	-922	-187	696	470	602	920
Rate	6.8	1.8	-21.8	-5.3	29.6	11.6	7.6	16.2
SAWYER								
Net Migration	592	173	-147	29	418	502	955	300
Rate	25.9	17.9	-15.7	3.6	114.5	61.2	50.3	15.5
SHAWANO								
Net Migration	1104	20	-1023	-516	563	582	863	520
Rate	14.7	0.6	-29.3	-17.9	35.6	18.5	13.1	10.0
SHEBOYGAN								
Net Migration	625	-249	-1258	-775	740	187	-65	-179
Rate	2.7	-2.6	-12.5	-8.6	11.5	1.8	-0.3	-1.3
TAYLOR								
Net Migration	400	-83	-543	-332	382	319	196	254
Rate	8.8	-4.2	-25.4	-19.5	48.5	21.4	6.0	10.8
TREMPEALEAU								
Net Migration	660	74	-578	-35	546	436	407	547
Rate	11.8	3.2	-23.6	-1.8	47.7	19.5	8.7	14.7
VERNON								
Net Migration	520	-31	-980	-310	477	320	281	368
Rate	10.0	-1.4	-36.1	-14.4	41.6	14.2	5.4	9.1
VILAS								
Net Migration	919	337	-174	223	541	801	1702	991
Rate	39.3	33.0	-16.0	26.7	121.3	83.9	74.8	44.2
WALWORTH								
Net Migration	1667	1498	1638	-1576	-1181	933	1286	941
Rate	12.2	24.6	26.1	-22.2	-19.1	13.7	10.7	11.4
WASHBURN								
Net Migration	581	122	-299	-20	384	415	673	295
Rate	23.7	12.1	-26.7	-2.1	84.8	43.1	31.4	15.3
WASHINGTON								
Net Migration	4293	569	-932	1356	3360	2721	1394	773
Rate	22.9	7.1	-12.3	23.7	85.9	33.0	10.9	12.2
WAUKESHA								
Net Migration	17196	912	-8626	-2471	11561	10817	722	450
Rate	32.1	3.2	-29.5	-10.8	93.9	38.4	1.3	2.2
WAUPACA								
Net Migration	1142	166	-601	-67	797	657	1037	935
Rate	13.0	4.6	-16.2	-2.1	41.2	18.1	14.1	14.4
WAUSHARA								
Net Migration	698	214	-260	-12	434	461	1157	654
Rate	20.8	15.6	-17.9	-0.9	57.4	32.9	40.6	24.0
WINNEBAGO								
Net Migration	45	927	1285	-2506	-2721	-699	-747	-348
Rate	0.2	7.2	9.8	-17.8	-21.9	-4.7	-2.9	-2.2
WOOD								
Net Migration	1221	-201	-1125	-318	1095	518	3	889
Rate	7.3	-2.7	-14.7	-5.2	26.8	7.1	2.9	11.3

TABLE 3

Net Migration by Age and Sex for Wisconsin Counties, 1970-80

	AGE GROUPS							
	0-14	15-19	20-24	25-29	30-34	35-44	45-64	65+
WISCONSIN								
Male Net Mig	16394	1873	-15339	-12566	18627	2348	-323	339
Female Net Mig	15051	5319	-4989	-14324	-4402	-264	-2800	3241
Male Rate	3.0	0.8	-6.4	-5.8	11.9	0.9	-0.1	0.2
Female Rate	2.9	2.4	-2.2	-6.7	-2.5	-0.1	-0.6	1.0
ADAMS								
Male Net Mig	287	184	-22	232	337	318	636	366
Female Net Mig	242	108	-60	52	96	284	610	306
Male Rate	27.5	42.1	-4.2	55.1	178.3	80.7	71.9	48.2
Female Rate	23.8	22.7	-12.6	14.7	41.6	65.0	63.7	35.0
ASHLAND								
Male Net Mig	68	15	-136	-207	-70	69	76	41
Female Net Mig	30	42	-79	-250	-31	60	73	34
Male Rate	3.6	1.8	-16.1	-24.4	-12.3	9.9	5.2	3.5
Female Rate	1.7	5.4	-10.1	-29.2	-5.7	8.3	4.5	2.1
BARRON								
Male Net Mig	698	265	-392	-303	476	383	347	399
Female Net Mig	460	144	-317	-212	280	372	370	282
Male Rate	17.7	16.2	-20.1	-17.0	59.5	25.1	10.7	17.1
Female Rate	11.8	8.7	-16.9	-13.0	29.6	23.6	10.2	9.2
BAYFIELD								
Male Net Mig	339	75	-190	-28	206	222	246	187
Female Net Mig	328	60	-161	26	176	199	264	16
Male Rate	26.2	13.6	-30.4	-5.3	71.0	43.5	22.3	18.4
Female Rate	27.1	11.3	-26.7	5.4	64.0	39.3	22.4	1.4
BROWN								
Male Net Mig	570	-378	-487	-140	1406	-34	-331	35
Female Net Mig	808	142	-15	-177	319	113	-422	450
Male Rate	2.6	-3.8	-5.3	-1.7	25.1	-0.4	-2.2	0.5
Female Rate	4.0	1.5	-0.2	-2.1	4.8	1.2	-2.7	4.6
BUFFALO								
Male Net Mig	94	1	-168	-120	108	59	68	108
Female Net Mig	106	-73	-222	-149	74	36	58	72
Male Rate	5.7	0.1	-22.1	-18.2	29.1	9.1	5.0	11.5
Female Rate	6.9	-10.1	-28.9	-25.6	19.9	5.3	4.3	6.2
BURNETT								
Male Net Mig	289	108	-76	9	194	224	478	244
Female Net Mig	367	117	-62	32	172	222	480	144
Male Rate	27.1	25.9	-17.0	2.2	108.4	59.3	54.4	28.9
Female Rate	37.3	30.5	-13.8	9.4	89.1	55.1	49.7	13.7
CALUMET								
Male Net Mig	304	-80	-333	-114	330	128	149	54
Female Net Mig	308	-68	-325	-165	222	46	156	36
Male Rate	7.7	-4.4	-19.9	-8.4	41.7	8.2	5.8	4.2
Female Rate	8.2	-3.9	-19.8	-11.8	24.2	2.9	6.0	2.3
CHIPPEWA								
Male Net Mig	581	-8	-678	-322	423	257	62	262
Female Net Mig	447	-68	-664	-199	234	207	87	220
Male Rate	9.2	-0.3	-24.8	-13.3	28.6	10.6	1.4	9.9
Female Rate	7.4	-2.6	-24.2	-8.8	14.8	8.4	1.8	6.3
CLARK								
Male Net Mig	566	18	-635	-310	358	252	262	189
Female Net Mig	370	-95	-649	-180	275	218	174	199
Male Rate	14.6	1.1	-34.1	-20.7	54.2	19.3	9.1	9.0
Female Rate	10.1	-5.9	-37.2	-13.8	41.4	15.4	5.8	7.6

Table 3, continued.

	AGE GROUPS							
	0-14	15-19	20-24	25-29	30-34	35-44	45-64	65+
COLUMBIA								
Male Net Mig	458	-23	-648	-197	507	275	292	195
Female Net Mig	384	-34	-582	-219	344	227	246	317
Male Rate	9.8	-1.1	-28.5	-10.5	48.1	13.0	7.4	8.0
Female Rate	8.5	-1.7	-27.5	-12.4	28.3	10.4	5.9	9.4
CRAWFORD								
Male Net Mig	230	-5	-292	-124	232	135	109	67
Female Net Mig	220	-16	-257	-124	163	111	71	78
Male Rate	12.1	-0.6	-34.3	-17.0	71.2	19.6	7.4	6.3
Female Rate	12.5	-2.0	-30.5	-16.9	43.8	15.8	4.6	6.0
DANE								
Male Net Mig	-1163	2198	8415	3801	-3101	-3021	-854	-234
Female Net Mig	-1274	2556	8873	2828	-5423	-2470	-945	481
Male Rate	-3.4	15.4	59.6	25.1	-17.1	-14.5	-3.4	-2.2
Female Rate	-3.9	18.4	66.1	17.6	-26.7	-12.3	-3.5	3.0
DODGE								
Male Net Mig	633	-82	-488	325	699	116	-140	282
Female Net Mig	655	-105	-829	-129	388	258	149	361
Male Rate	7.5	-2.3	-12.3	10.3	31.2	2.8	-1.9	7.1
Female Rate	8.3	-3.1	-23.1	-4.4	19.0	7.0	2.1	6.8
DOOR								
Male Net Mig	416	212	125	182	320	360	345	229
Female Net Mig	429	66	-37	69	316	294	444	246
Male Rate	16.8	22.0	12.1	19.6	56.2	38.9	17.9	14.9
Female Rate	19.1	7.3	-3.5	7.9	61.8	32.0	20.6	12.3
DOUGLAS								
Male Net Mig	-11	21	-118	-423	-213	-59	-134	-257
Female Net Mig	-5	74	-152	-374	-273	-80	-83	-185
Male Rate	-0.2	1.0	-5.2	-18.1	-11.4	-2.7	-3.2	-9.0
Female Rate	-0.1	3.7	-6.9	-17.0	-15.2	-3.7	-1.8	-4.7
DUNN								
Male Net Mig	330	757	1545	-449	-734	105	147	106
Female Net Mig	311	1096	1492	-626	-625	141	91	90
Male Rate	9.9	63.0	118.9	-24.1	-38.0	7.5	6.0	6.2
Female Rate	10.0	91.6	115.8	-32.6	-36.5	10.7	3.5	4.2
EAU CLAIRE								
Male Net Mig	563	1374	1628	-637	-324	337	246	115
Female Net Mig	493	2280	2636	-1125	-985	359	190	172
Male Rate	7.1	45.5	50.4	-16.5	-9.9	9.8	4.1	3.4
Female Rate	6.4	77.4	85.9	-24.8	-24.8	10.7	2.8	3.4
FLORENCE								
Male Net Mig	124	23	-67	-12	59	77	109	93
Female Net Mig	127	17	-61	3	49	62	81	95
Male Rate	30.9	13.0	-34.0	-8.1	81.9	53.1	34.8	36.0
Female Rate	37.5	10.2	-31.6	2.4	60.5	42.8	23.1	33.8
FOND DU LAC								
Male Net Mig	360	-76	-789	-847	465	109	21	76
Female Net Mig	328	181	-371	-736	-138	9	-43	307
Male Rate	3.4	-1.7	-16.8	-18.7	17.0	2.4	0.3	1.8
Female Rate	3.2	4.2	-8.4	-16.8	-4.1	0.2	-0.5	4.8

Table 3, continued.

	AGE GROUPS							
	0-14	15-19	20-24	25-29	30-34	35-44	45-64	65+
FOREST								
Male Net Mig	150	163	-83	-229	61	110	170	153
Female Net Mig	96	23	-110	-50	109	99	161	98
Male Rate	15.3	37.6	-19.6	-42.7	34.3	31.9	25.8	25.9
Female Rate	10.3	5.6	-27.0	-15.3	66.9	30.3	20.8	15.4
GRANT								
Male Net Mig	103	712	655	-1022	-777	54	121	258
Female Net Mig	97	358	-44	-665	-507	60	158	450
Male Rate	1.7	27.6	24.0	-33.5	-32.8	2.3	2.9	10.4
Female Rate	1.7	14.5	-1.6	-26.3	-25.3	2.6	3.6	12.7
GREEN								
Male Net Mig	377	-17	-259	86	377	201	121	162
Female Net Mig	405	-22	-191	-14	261	149	111	170
Male Rate	11.7	-1.2	-18.0	7.2	50.3	14.6	4.6	10.0
Female Rate	12.7	-1.7	-13.6	-1.2	30.9	10.8	3.8	7.6
GREEN LAKE								
Male Net Mig	96	19	-165	-42	105	66	148	225
Female Net Mig	109	2	-156	-55	48	83	219	232
Male Rate	4.8	2.3	-20.4	-6.1	20.2	8.1	8.8	19.1
Female Rate	5.8	0.3	-19.8	-8.0	9.3	9.8	12.2	14.3
IOWA								
Male Net Mig	209	-58	-366	-145	183	70	32	23
Female Net Mig	95	-157	-446	-178	153	58	-17	-12
Male Rate	8.9	-5.1	-30.7	-15.4	32.5	8.1	1.7	2.1
Female Rate	4.1	-14.7	-37.8	-20.0	28.3	6.5	-0.9	-0.8
IRON								
Male Net Mig	72	28	-82	-72	48	71	102	42
Female Net Mig	88	17	-97	-48	36	47	105	-11
Male Rate	12.5	10.3	-26.2	-23.6	30.2	30.6	15.9	6.9
Female Rate	15.9	7.1	-29.9	-18.5	25.2	18.8	13.8	-1.5
JACKSON								
Male Net Mig	170	24	-292	-191	211	164	185	139
Female Net Mig	150	14	-245	-101	170	121	107	118
Male Rate	9.1	2.9	-31.5	-24.0	56.4	23.1	12.6	12.2
Female Rate	8.6	2.0	-30.9	-14.6	42.4	16.5	6.7	9.0
JEFFERSON								
Male Net Mig	527	803	196	-602	10	246	237	115
Female Net Mig	465	651	-70	-486	15	203	185	47
Male Rate	7.3	26.5	6.5	-18.6	0.4	7.1	4.2	3.5
Female Rate	6.8	23.2	-2.4	-15.9	0.6	5.9	3.1	1.0
JUNEAU								
Male Net Mig	283	-2	-357	-145	160	185	368	291
Female Net Mig	245	37	-276	-81	139	178	392	191
Male Rate	12.4	-0.2	-33.0	-16.7	33.6	21.2	20.5	23.5
Female Rate	11.2	4.0	-28.3	-10.2	27.4	19.2	20.9	11.8
KENOSHA								
Male Net Mig	282	-431	-675	-315	578	52	-167	-256
Female Net Mig	335	-296	-496	-294	-44	-301	-463	-206
Male Rate	2.0	-6.4	-10.7	-5.7	15.0	0.7	-1.4	-4.5
Female Rate	2.4	-4.6	-7.9	-5.4	-1.0	-4.1	-3.7	-2.6

Table 3, continued.

	AGE GROUPS							
	0-14	15-19	20-24	25-29	30-34	35-44	45-64	65+
KEWAUNEE								
Male Net Mig	142	-29	-250	-200	72	29	5	82
Female Net Mig	134	-71	-255	-317	44	3	57	13
Male Rate	5.8	-2.9	-21.9	-20.2	12.1	3.1	0.3	7.1
Female Rate	6.1	-6.8	-25.0	-32.6	7.7	0.3	3.0	0.9
LA CROSSE								
Male Net Mig	250	882	1449	-258	23	79	74	112
Female Net Mig	328	1929	2609	-916	-975	117	100	337
Male Rate	2.6	23.1	35.7	-6.0	0.7	1.9	1.0	2.7
Female Rate	3.7	52.3	67.7	-18.4	-23.2	2.8	1.3	5.3
LAFAYETTE								
Male Net Mig	18	-49	-387	-175	48	59	-17	-4
Female Net Mig	76	-102	-410	-198	47	30	19	-8
Male Rate	0.8	-4.8	-33.4	-19.8	9.8	7.6	-1.0	-0.4
Female Rate	3.8	-10.4	-37.7	-24.4	10.8	3.6	1.1	-0.6
LANGLADE								
Male Net Mig	164	-23	-423	-263	149	146	192	148
Female Net Mig	174	-14	-405	-272	89	104	254	56
Male Rate	7.2	-2.2	-37.6	-27.6	32.6	17.6	11.1	11.6
Female Rate	8.1	-1.4	-37.3	-29.2	17.6	11.9	13.3	3.1
LINCOLN								
Male Net Mig	298	245	-298	-92	284	242	315	218
Female Net Mig	233	81	-305	-75	158	185	231	190
Male Rate	10.4	19.8	-22.8	-9.0	53.1	20.2	13.8	14.2
Female Rate	8.5	6.7	-24.0	-7.7	24.2	14.9	9.3	9.1
MANITOWOC								
Male Net Mig	284	-304	-1114	-484	527	-38	-167	75
Female Net Mig	128	-361	-960	-817	-84	-94	-170	45
Male Rate	2.9	-6.8	-24.0	-12.5	22.0	-0.9	-2.1	1.6
Female Rate	1.4	-8.1	-22.2	-20.5	-2.9	-2.2	-2.0	0.7
MARATHON								
Male Net Mig	1354	143	-695	86	1284	756	179	75
Female Net Mig	1220	261	-630	-22	888	537	37	42
Male Rate	10.4	2.6	-12.4	1.8	44.8	13.7	1.9	1.5
Female Rate	9.9	5.1	-11.4	-0.5	27.5	9.6	0.4	0.6
MARINETTE								
Male Net Mig	673	79	-466	-247	360	408	414	153
Female Net Mig	596	41	-348	-180	254	285	400	99
Male Rate	16.8	4.4	-24.0	-14.8	41.5	24.3	12.5	5.8
Female Rate	15.4	2.4	-19.0	-11.4	25.9	16.4	10.8	2.9
MARQUETTE								
Male Net Mig	273	126	-118	8	178	192	451	289
Female Net Mig	281	76	-75	17	141	188	427	171
Male Rate	26.6	31.1	-23.0	2.0	113.4	50.8	53.3	39.0
Female Rate	29.5	19.7	-18.1	4.6	73.8	47.4	46.5	17.8
MENOMINEE								
Male Net Mig	44	-5	-45	-9	35	35	48	4
Female Net Mig	29	9	-67	-2	26	34	50	-1
Male Rate	8.0	-2.2	-23.2	-7.0	66.0	32.4	24.5	3.3
Female Rate	5.1	4.7	-30.2	-1.7	37.7	28.3	24.9	-0.9
MILWAUKEE								
Male Net Mig	-19006	-7788	-3780	-956	-3618	-16038	-13532	-9400
Female Net Mig	-18127	-6070	610	-1410	-11487	-14939	-13800	-9128
Male Rate	-15.4	-15.3	-7.3	-2.1	-9.4	-26.3	-12.8	-16.9
Female Rate	-15.2	-12.2	1.2	-3.0	-24.2	-23.5	-11.8	-10.8

Table 3, continued.

	AGE GROUPS							
	0-14	15-19	20-24	25-29	30-34	35-44	45-64	65+
MONROE								
Male Net Mig	560	36	-599	-149	465	378	314	162
Female Net Mig	532	-22	-377	-166	289	266	140	156
Male Rate	14.8	2.2	-32.1	-10.3	55.2	25.1	9.1	8.0
Female Rate	14.5	-1.4	-22.6	-11.4	33.1	17.9	4.2	6.3
OCONTO								
Male Net Mig	544	134	-515	-191	334	402	374	192
Female Net Mig	416	51	-439	-160	306	321	395	23
Male Rate	18.0	10.0	-33.0	-15.5	51.4	35.2	15.7	10.4
Female Rate	13.8	3.8	-29.9	-14.1	49.5	28.1	15.2	1.0
ONEIDA								
Male Net Mig	622	238	-274	96	505	590	750	433
Female Net Mig	520	171	-174	58	394	607	798	304
Male Rate	21.8	19.5	-19.5	8.5	104.8	51.3	30.4	24.9
Female Rate	19.7	13.4	-13.1	5.3	62.8	49.4	29.6	13.6
OUTAGAMIE								
Male Net Mig	646	-204	-1189	-359	802	163	-178	54
Female Net Mig	544	-268	-827	-684	-34	-6	-295	150
Male Rate	4.0	-2.7	-16.4	-6.0	19.9	2.4	-1.6	1.0
Female Rate	3.6	-3.8	-11.9	-10.9	-0.7	-0.1	-2.5	2.0
OZAUKEE								
Male Net Mig	1421	83	-828	-173	1160	1341	692	142
Female Net Mig	1588	63	-880	-162	1234	1159	575	316
Male Rate	20.4	2.4	-23.9	-6.7	81.8	42.2	11.4	6.3
Female Rate	24.2	2.0	-26.4	-6.3	79.5	33.8	9.3	10.8
PEPIN								
Male Net Mig	34	-61	-167	-74	59	28	26	71
Female Net Mig	46	-9	-157	-71	29	26	24	50
Male Rate	3.7	-13.3	-34.7	-21.0	29.8	9.4	4.1	14.3
Female Rate	5.5	-2.2	-37.1	-23.6	14.6	8.0	3.7	7.7
PIERCE								
Male Net Mig	273	566	756	-410	-269	149	148	51
Female Net Mig	182	643	615	-310	-254	190	86	-11
Male Rate	8.0	39.3	55.2	-23.9	-18.4	10.6	6.6	3.7
Female Rate	5.4	48.8	46.8	-19.9	-19.1	14.4	3.7	-0.6
POLK								
Male Net Mig	670	131	-335	41	406	422	466	356
Female Net Mig	634	54	-224	132	398	388	497	298
Male Rate	19.8	9.4	-22.5	3.3	54.2	32.9	18.8	18.0
Female Rate	20.5	3.9	-16.5	11.9	57.0	30.3	18.5	12.4
PORTAGE								
Male Net Mig	542	1038	1867	-743	-736	267	333	239
Female Net Mig	513	1244	1747	-858	-653	321	245	301
Male Rate	8.8	41.8	81.8	-22.2	-25.9	10.4	8.5	10.8
Female Rate	8.8	52.0	78.6	-25.9	-24.4	13.2	5.9	10.1
PRICE								
Male Net Mig	236	-16	-302	-85	180	178	207	129
Female Net Mig	197	-18	-216	-50	132	135	222	16
Male Rate	13.5	-2.2	-36.7	-13.9	60.2	28.9	15.0	10.8
Female Rate	12.5	-2.7	-30.8	-8.4	38.0	21.8	15.0	1.1

Table 3, continued.

	AGE GROUPS							
	0-14	15-19	20-24	25-29	30-34	35-44	45-64	65+
RACINE								
Male Net Mig	306	-1175	-2534	-698	1319	-242	-943	-828
Female Net Mig	118	-1081	-1932	-682	297	-649	-1235	-477
Male Rate	1.4	-11.8	-25.4	-8.8	25.4	-2.4	-5.5	-10.6
Female Rate	0.6	-11.3	-19.9	-8.6	4.6	-6.1	-6.8	-4.3
RICHLAND								
Male Net Mig	3	-36	-282	-178	90	66	78	78
Female Net Mig	80	-48	-204	-198	76	13	67	74
Male Rate	6.1	-4.2	-29.0	-19.9	19.0	8.5	4.7	7.1
Female Rate	1.7	-5.7	-23.3	-22.7	16.6	1.7	3.7	4.9
ROCK								
Male Net Mig	457	-514	-1168	-466	784	-203	-368	-59
Female Net Mig	458	-517	-703	-259	92	-276	-271	329
Male Rate	2.5	-6.8	-15.5	-7.4	18.1	-2.5	-2.8	-1.0
Female Rate	2.9	-7.1	-9.9	-4.3	1.8	-3.3	-2.0	3.7
RUSK								
Male Net Mig	228	19	-181	-189	162	134	191	74
Female Net Mig	228	-2	-287	-99	102	98	184	36
Male Rate	13.3	2.5	-22.4	-25.0	48.7	23.2	14.2	7.3
Female Rate	13.7	-0.3	-34.1	-15.1	27.6	15.9	12.6	2.9
ST. CROIX								
Male Net Mig	898	141	-277	189	804	635	294	196
Female Net Mig	734	86	-127	259	566	517	194	340
Male Rate	18.3	6.7	-13.0	11.3	79.2	32.8	8.9	11.7
Female Rate	15.4	4.2	-6.3	17.1	49.3	25.9	5.8	15.3
SAUK								
Male Net Mig	308	52	-462	-50	461	217	266	400
Female Net Mig	338	18	-460	-137	235	253	336	520
Male Rate	6.2	2.7	-21.5	-2.9	43.5	10.6	7.0	16.6
Female Rate	7.3	0.9	-22.1	-7.8	18.3	12.6	8.2	15.9
SAWYER								
Male Net Mig	349	102	-112	-25	234	267	491	196
Female Net Mig	243	71	-35	54	184	235	464	104
Male Rate	31.4	20.6	-23.1	-5.7	139.3	68.6	54.7	22.3
Female Rate	20.6	15.0	-7.7	14.6	93.4	54.5	46.3	9.9
SHAWANO								
Male Net Mig	580	20	-515	-295	313	300	450	309
Female Net Mig	524	0	-508	-221	250	282	413	211
Male Rate	15.1	1.1	-29.9	-19.0	42.0	19.4	14.0	13.3
Female Rate	14.4	0.0	-28.6	-16.6	29.9	17.7	12.1	7.4
SHEBOYGAN								
Male Net Mig	323	-68	-584	-461	626	105	3	-64
Female Net Mig	302	-181	-674	-314	114	82	-68	-115
Male Rate	2.7	-1.4	-11.4	-9.9	20.6	2.0	0.0	-1.1
Female Rate	2.7	-3.8	-13.7	-7.3	3.3	1.5	-0.7	-1.4
TAYLOR								
Male Net Mig	182	-13	-291	-139	203	210	118	176
Female Net Mig	218	-70	-252	-193	179	109	78	78
Male Rate	7.7	-1.4	-26.2	-16.0	48.9	30.1	7.3	16.2
Female Rate	10.1	-7.0	-24.4	-23.0	48.0	13.7	4.7	6.2
TREMPEALEAU								
Male Net Mig	318	32	-292	-1	308	237	216	299
Female Net Mig	342	42	-286	-34	238	199	191	248
Male Rate	11.1	2.7	-23.0	-0.1	55.1	21.2	9.2	17.8
Female Rate	12.4	3.7	-24.7	-3.5	40.7	17.8	8.2	12.1

Table 3, continued.

	AGE GROUPS							
	0-14	15-19	20-24	25-29	30-34	35-44	45-64	65+
VERNON								
Male Net Mig	205	74	-477	-139	290	199	135	210
Female Net Mig	315	-105	-503	-171	187	121	146	158
Male Rate	7.5	6.5	-34.2	-12.4	52.1	17.6	5.3	11.9
Female Rate	12.8	-9.2	-38.0	-16.6	31.7	10.8	5.5	6.9
VILAS								
Male Net Mig	443	194	-92	63	288	425	787	575
Female Net Mig	476	143	-82	160	253	376	915	416
Male Rate	37.0	37.3	-17.1	13.5	141.2	93.2	72.0	58.4
Female Rate	41.8	28.5	-15.1	43.5	104.6	75.3	77.5	33.2
WALWORTH								
Male Net Mig	905	604	716	-709	-561	371	624	344
Female Net Mig	762	894	922	-867	-620	562	662	597
Male Rate	12.7	19.3	22.3	-20.1	-18.2	10.7	10.8	10.1
Female Rate	11.6	30.3	30.3	-24.2	-20.0	16.9	10.6	12.3
WASHBURN								
Male Net Mig	340	95	-170	-17	210	215	371	202
Female Net Mig	241	27	-129	-3	174	200	302	93
Male Rate	27.0	20.0	-30.3	-3.5	91.7	45.7	37.6	23.7
Female Rate	20.3	5.0	-23.0	-0.6	77.7	40.7	26.1	8.6
WASHINGTON								
Male Net Mig	2161	251	-559	584	1838	1522	756	244
Female Net Mig	2132	318	-373	772	1522	1199	638	529
Male Rate	22.4	6.1	-14.3	20.3	104.7	37.6	11.9	8.9
Female Rate	23.5	8.1	-10.2	27.1	70.5	28.6	9.9	14.7
WAUKESHA								
Male Net Mig	8660	734	-4254	-1732	5785	6097	757	-283
Female Net Mig	8536	178	-4372	-739	5776	4720	-35	733
Male Rate	31.2	5.0	-28.2	-14.7	100.6	46.6	2.8	-3.2
Female Rate	32.9	1.3	-30.8	-6.7	88.0	31.4	-0.1	6.3
WAUPACA								
Male Net Mig	636	109	-373	-48	480	324	517	537
Female Net Mig	506	57	-228	-19	317	333	520	398
Male Rate	14.5	6.0	-19.3	-2.9	51.6	17.5	14.7	19.3
Female Rate	11.6	3.2	-12.8	-1.2	31.5	18.6	13.6	10.7
WAUSHARA								
Male Net Mig	345	153	-108	-39	236	239	527	408
Female Net Mig	353	61	-152	27	198	222	630	246
Male Rate	19.8	22.7	-14.7	-5.7	61.5	34.7	38.6	35.0
Female Rate	21.7	8.8	-21.1	4.6	53.2	31.1	42.5	15.8
WINNEBAGO								
Male Net Mig	-24	226	413	-1008	-948	-398	-357	-326
Female Net Mig	69	701	872	-1462	-1773	-301	-390	-22
Male Rate	-0.2	3.4	6.3	-14.7	-16.1	-5.4	-2.9	-5.1
Female Rate	0.5	11.2	13.4	-20.3	-27.1	-4.1	-2.9	-0.2
WOOD								
Male Net Mig	616	-189	-790	-210	819	309	219	361
Female Net Mig	605	-12	-335	-108	276	209	158	528
Male Rate	7.2	-4.9	-20.6	-6.8	46.0	8.6	3.5	10.9
Female Rate	7.4	-0.3	-8.8	-3.5	11.9	5.7	2.3	11.6

TABLE 4

Net Migration by Age for Wisconsin Counties, 1960-1980

ANALYTIC GROUPINGS	AGE GROUPS							
	0-14	15-19	20-24	25-29	30-34	35-44	45-65	65+
METROPOLITAN COUNTIES								
1960-1970								
Net Migration	5697	4877	6352	16121	4823	-3473	-4258	-9251
Rate	0.6	1.7	2.6	8.8	3.0	-1.0	-0.7	-3.1
1970-1980								
Net Migration	-2434	-4554	-2824	-8563	-772	-18479	-29682	-16416
Rate	-0.3	-1.4	-0.9	-2.9	-0.3	-5.1	-4.8	-4.6
NONMETROPOLITAN COUNTIES								
1960-1970								
Net Migration	19207	-5442	-43787	-24393	5713	6727	11159	10559
Rate	4.9	-3.8	-32.7	-24.8	9.3	5.1	3.9	6.1
1970-1980								
Net Migration	33879	11746	-17504	-18363	14997	20563	26559	19996
Rate	10.3	8.2	-11.6	-13.4	16.8	14.8	9.7	9.7
RECREATIONAL COUNTIES								
1960-1970								
Net Migration	7107	-2133	-14253	-8140	2236	3178	6935	4893
Rate	7.1	-5.7	-39.8	-30.4	14.5	9.5	8.8	9.9
1970-1980								
Net Migration	13982	4939	-4736	-2329	6792	10250	16066	8322
Rate	17.9	14.5	-13.0	-7.3	34.4	31.4	23.8	14.7
AGRICULTURAL COUNTIES								
1960-1970								
Net Migration	1433	-2936	-13715	-9501	197	-89	-298	1877
Rate	1.3	-7.0	-35.3	-33.0	1.1	-0.2	-0.4	3.8
1970-1980								
Net Migration	8151	3355	-4643	-6325	3450	4573	4641	5074
Rate	8.3	7.9	-10.2	-15.3	13.0	11.4	5.7	8.4
MANUFACTURING COUNTIES								
1960-1970								
Net Migration	9371	-9075	-27291	7077	10514	-1451	-3606	-7248
Rate	1.1	-3.3	-11.8	4.1	7.3	-0.5	-0.6	-2.5
1970-1980								
Net Migration	2736	-14590	-35165	-17050	12083	-11643	-24662	14894
Rate	0.4	-5.0	-11.8	-6.5	6.0	-3.6	-4.3	-4.3
UW SYSTEM COUNTIES								
1960-1970								
Net Migration	8857	22531	26949	2960	-2282	2595	6040	2011
Rate	2.7	21.1	29.5	3.9	-3.6	2.3	2.9	1.8
1970-1980								
Net Migration	23382	20629	25438	-8248	-3162	8578	970	3601
Rate	7.8	15.4	19.0	-6.0	-2.7	5.7	0.4	2.6

URBAN AND RURAL POPULATION CHANGE IN WISCONSIN
1970-1980

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Introduction

The dual trends of urban decline and rural resurgence have become familiar topics. The new trends were imperceptible in the beginning, but became strong and obvious during the 1970s. Studies conducted in the last decade on this subject, however, were based on estimates, sample surveys and special censuses. The 1980 census provides an opportunity to conduct analysis on the basis of actual counts. This paper reports the results of a study that uses this new and more precise information.

A scrutiny of population change in the cities, villages and towns of Wisconsin during the last decade is undertaken here. What role did communities of different size categories play in the state's population growth in the 1970s? What were the magnitudes and rates of population change exhibited by the various community groups? How much gain did they register because of natural increase, i.e., births minus deaths? And how much was contributed by net migration, i.e., immigration minus outmigration? This paper addresses these questions and delineates the contours of population change, natural increase and net migration.

The study of past and current demographic changes is essential to an understanding of the population dynamics of an area. Knowledge of these trends is helpful in sketching plausible future scenarios for developing policies, plans and programs. The future course of population in any area is at least partly the outgrowth of the past and the present.

A limitation of the present analysis is that it answers only the questions of "how much change and where," but stops short of "why or how." A focus on the underlying factors and forces that caused these changes is outside the scope of this study. One can draw upon previous research to outline the latter mechanism until new studies of that nature are undertaken. The authors propose to pursue analysis along those lines at a later date. Here, the objective is to ascertain and portray the demographic picture as it developed in the 1970s.

The Procedure

Population change is the result of two factors: natural increase and net migration. Data on the numbers of births and deaths from 1970 to 1980 are available for all counties and for 145 incorporated places in Wisconsin. Thus the natural increase component of 1970-80 population change can be accurately computed for a variety of geographic areas. Net migration can be computed only indirectly; it is the remainder when natural increase is subtracted from total population change. Of course, the remainder

can be either a positive or negative number, indicating net immigration or net outmigration.

The 1970-80 population changes in Wisconsin are presented here for several geographic areas and types of areas. Brief definitions are provided here; the Appendix contains more detail. Every county in the state is classified as metropolitan or nonmetropolitan. This distinction is based on the Census definition of a Standard Metropolitan Statistical Area (SMSA), which is a geographic area of one county or more and generally contains a city of at least 50,000 people. All communities within counties are then categorized by urban/rural status; every incorporated or unincorporated place of 2,500 or more inhabitants is urban, as well as the densely settled areas surrounding cities of 15,000 or more; all remaining communities are rural. Partly urban and partly rural communities occur when the densely settled area around a city has expanded into a minor civil division (MCD) which was formerly totally rural. For purposes of analysis, urban places are further broken down into four population size groups: 50,000 or more; 15,000-49,999; 7,500-14,999; less than 7,500. Vital statistics data are not available for some of the smaller urban municipalities, so these are separated into a fifth urban category.

The Appendix provides additional important information about the procedures used in this analysis. It should be consulted for a better understanding of the computation of rates used here, for definitions, and for some caveats about the data.

Findings

Table 1 presents the components of population change and the average annual rates of natural increase, net migration and total population change for different groups of urban and rural communities in the metropolitan and nonmetropolitan areas of Wisconsin. The table also gives the metropolitan, nonmetropolitan and state totals.

State Level Data

The last portion of Table 1 presents data for the whole state. During the last decade Wisconsin added 288,000 persons to its population, growing from 4,418,000 inhabitants in 1970 to 4,706,000 in 1980. However, the growth in the state's population comprises changes of substantially different magnitudes in various sizes of communities. Cities of 50,000 or more persons in 1970 suffered a total loss of 111,000 people over the 10-year period, while the entirely rural areas gained 226,000 persons. Urban communities in the 15,000-50,000 size category added only 29,000 residents, whereas the smaller urban MCDs exhibited an increase of 93,000 inhabitants, and the partly urban MCDs increased their population by 51,000 persons. Clearly, population growth in the last decade was mostly confined to the small urban and rural communities, while cities of large and medium size showed a loss or only moderate gain.

At the state level, population growth was almost entirely due to natural increase, which contributed 278,000 persons towards a total growth of 288,000. All MCD groups experienced natural increase. Cities of over 50,000 people in 1970 as well as the entirely rural

areas both showed almost equally substantial natural gains (86,000 and 92,000 respectively). In short, differences in natural increase are not responsible for the great differences in total change evidenced in different urban and rural areas.

Differences in population change among different areas of the state resulted largely from differences in their migration experience, although for the state as a whole net migration added only 10,000 people in the 1970s, which is a marginal contribution indeed. Cities of 50,000 population or more in 1970 registered a loss of 196,000 persons in the migration process, while the net in-flow of people made a substantial contribution of 134,000 residents to the growth of entirely rural areas. The medium size cities of 15,000-50,000 also showed a net migration loss of almost 12,000 persons. Smaller urban communities and partly urban MCDs, on the other hand, exhibited net migration gains of 53,000 and 30,000 respectively. A movement away from not only large but also medium size cities and into smaller urban and rural areas was clearly the trend in the 1970s.

While magnitudes of change are important, an examination of the rates of change provides a better comparison of the population behavior of different areas (see last section of Table 1). Wisconsin recorded population growth between 1970 and 1980 at an annual average rate of 6.3 persons per 1,000 population, a rate lower than the national rate of growth but better than most states in the nation's North Central region. However, the large cities of Wisconsin registered an annual loss of 8 persons per 1,000

population. The medium size cities of 15,000-50,000 exhibited an annual growth rate of 4.2, which was discernibly lower than the state's average growth rate. Urban communities in the 7,500-15,000 size range had an annual growth rate of 6.6, which was just a shade better than the state's 6.3 rate. The real growth momentum was evidenced in the much smaller urban communities and the rural areas. Urban communities with no vital statistics and partly urban MCDs both increased their total population at an annual rate of over 20 per 1,000 population. Not far behind, of course, were the entirely rural areas with an annual growth rate of almost 16 persons per 1,000 population.

The state's average annual rate of natural increase in the 1970s was 6.1 per 1,000 population. Natural increase rates for different groups of urban and rural areas ranged from 4.1 in the urban communities of under 7,500 persons (with data on births and deaths) to 8.4 in the group of partly urban MCDs. Among the 145 places for which vital statistics data are available, the rate of natural increase shows a steady decline from 6.2 for cities of over 50,000 people to 4.1 for the under 7,500 category. In the rest of the state, which includes essentially newly urban and entirely rural population, the rate of natural increase was distinctly higher than the state's average rate and ranged between 6.5 and 8.4. All these observations, however, should not overshadow the fact that the variation in natural increase rates does not come close to the wide variation in rates of total population change for different areas of the state.

Net migration added only two-tenths of one person per year for every 1,000 of Wisconsin's population in the 1970-1980 decade. As mentioned before, the impact of net migration assumes great significance only at the sub-state level. Cities of over 50,000 suffered an annual loss of more than 14 persons per 1,000 population. The annual loss rate for medium size cities (in the 15,000-50,000 category) was moderate at less than 2 people. It was nevertheless a loss in the migration process. All other groups comprising MCDs with (mostly) less than 15,000 inhabitants in 1970 made a net migration gain. Urban communities in the 7,500-15,000 category added only 2 persons per 1,000 population per year. The impact of net migration was much greater in the smaller urban communities (with or without vital statistics), the partly urban MCDs, and the entirely rural areas. The net migration rates for these groups ranged from 8.6 to 15.8. The rural areas experienced net immigration of over 9 persons per 1,000 population per year. In short, the larger cities had to cope with a substantial rate of net outmigration, while the smaller urban and rural areas exhibited high rates of net immigration in the 1970s.

So far, population change in different groups of MCDs has been examined without regard to their metropolitan status. The characteristics of metropolitan and nonmetropolitan counties are different, and it is worthwhile to examine the population behavior of MCD groups distributed between the metropolitan and nonmetropolitan sectors.

Metropolitan and Nonmetropolitan Areas

One should note, at the outset, that cities of over 50,000 persons and partly urban MCDs are not found in the nonmetropolitan counties. A comparison of the remaining urban and rural categories shows that the rate of population change is lower in the nonmetropolitan than in the metropolitan areas for every group of urban and rural communities (see Table 1). In some cases the disparity is much greater than in others. The overall pattern, however, of much higher growth rates for urban communities with less than 7,500 persons and for the rural areas is observed both in the metropolitan and nonmetropolitan regions.

The large metropolitan cities exhibited an annual rate of decline of 8 persons per 1,000 population. This factor explains the lower rate of population change in metropolitan areas (4.1), as compared with that of nonmetropolitan areas (10.9).

The metropolitan rate of natural increase, on the other hand, is higher (6.9 per 1,000 population per year) than the nonmetropolitan rate (4.5). This is partially due to the fact that the annual rate of natural increase in large cities is 6.2. In this case, the large cities do not pull the metropolitan rate down. In all other groups of urban and rural areas, the observations made with reference to rates of population change are also true for the rates of natural increase, i.e., the metropolitan rates of natural increase are higher than the nonmetropolitan rates.

The net migration experience of the metropolitan and nonmetropolitan areas is similar to the rates of population change

examined before. The net outflow of population from the metropolitan areas occurred at an annual rate of slightly less than 3 persons per 1,000 population, mainly as a result of the substantial net migration loss suffered by cities of over 50,000 population (14.2 per 1,000). The nonmetropolitan areas, on the other hand, registered a net migration gain of 6.4 per 1,000 population per year. This result should not conceal the fact that the nonmetropolitan rates of net migration were generally lower than the metropolitan rates in different groups of MCDs, excluding the large cities. Medium size cities in the 15,000-50,000 size range showed similar annual net outmigration rates in the metropolitan and nonmetropolitan areas (1.7 and 1.6 persons per 1,000 population respectively). A more interesting finding is that communities in the 7,500-15,000 population category posted an annual net migration gain of 4 persons per 1,000 population in the metropolitan areas as against a net loss of one person per 1,000 population in the nonmetropolitan areas. This finding seems to suggest that comparatively smaller urban places in nonmetropolitan areas tend to behave like their big brothers both in the metropolitan and nonmetropolitan areas. Lack of employment opportunities or annexation possibilities could bring about this result. A more important factor, however, could be the tendency to move outside the city boundary. This phenomenon, experienced by larger cities in the metropolitan areas, seems to affect even smaller cities in the nonmetropolitan areas.

Growth in Urban Communities

This analysis was based on the total population of MCDs of different size categories. Individual urban places were not treated as units of analysis. Table 2 presents a distribution of 145 urban communities for which vital statistics data are available by population size and rates of natural increase, net migration and total population change. The median rate of natural increase shows a generally steady rise from 2.04 per 1000 population per year for urban communities with less than 5,000 population to 6.43 for cities of over 50,000 in 1970. As many as 16 out of 54 places (i.e., 30 percent) in the smallest group had more deaths than births. This proportion steadily decreases as the community size increases. Only 1 out of 34 places with 15,000 or more persons experienced this phenomenon.

Net migration rate, on the other hand, shows an exactly opposite trend. The median rate of net migration generally decreased from 5.12 in the smallest urban class to -8.41 in the cities of 50,000 or more. The proportion of places showing a net loss was 24.1 percent (12 out of 54) in the smallest size category. The proportion increased to 34.8 percent in the 5,000-7,500 population range, and further jumped to over 50 percent in the different size categories from 7,500 to 50,000. Most important of all, every city of 50,000 persons or more in 1970 suffered a net loss in the migration process during the 1970s.

Finally, the median rate of population change shows a drop from 6.13 per 1,000 persons per year for the smallest urban places to

-5.34 for the larger cities. Clearly the overall trend observed in Table 2 is that the larger the place the lower its growth rate. Cities in the 25,000-50,000 category seem to avoid the trend. However, allowances for annexations might change the picture to a certain extent.

Table 3 presents a distribution of the 145 urban places (with data on births and deaths) by metropolitan-nonmetropolitan location and by gainers and losers in the migration process. The migration loss by every large metropolitan city is mentioned before. The proportion of gainers generally increases as population size decreases, both in the metropolitan and nonmetropolitan areas. The proportion stays at 1 out of 3 for communities over 7,500 population in the nonmetropolitan counties. In the metropolitan counties, the proportion is more than 2 out of 5 in 15,000-50,000 category, and 1 out of 2 in the 7,500-15,000 range. Among places under 7,500, 3 out of 4 showed a gain through migration. Thus, the smallest urban communities, irrespective of their location, were the most attractive places to migrants.

Looking Forward

Significant growth registered by small urban communities and rural areas in the 1970s is clearly demonstrated by the results presented in this paper. Is this trend likely to continue unabated in the future? A definitive answer to this question is difficult. One can say, however, that a drastic change in direction or a sudden slowdown in the momentum is not anticipated. Human behavior

generally cannot be expected to change abruptly; only a gradual change in the trends is likely. Analysis based on special censuses conducted in the last decade may provide some clues to the question of whether the rates were substantially different between the early part and the latter part of the 1970s. A continuous watch based on annual population estimates may also prove valuable in this context. It is difficult to predict trends also because the current situation in terms of housing in particular and the economy in general is of an unusual nature. As normalcy resumes, the basic trends should assert themselves and the answer to the question raised before may clearly emerge. One cannot overemphasize, of course, the need for continuing studies in this regard.

APPENDIX

The amount of natural increase in Wisconsin's population between April 1, 1970 and April 1, 1980 was computed from three-fourths of the births and deaths in 1970 and one-fourth of those in 1980 along with all births and deaths during the intervening years. Net migration was obtained as the residual by subtracting natural increase from total growth. It should be noted that this is migration balance only, i.e., immigration minus outmigration. Often the net result is small although the amount of in- and out-movement of people is quite substantial.

The rates of population change, natural increase and net migration are derived per 1000 population per year. The average of the 1970 and 1980 population is used as the base for this purpose. The precise formulas are:

- 1) Rate of Population Change =

$$(P_{80} - P_{70}) \div [(P_{80} + P_{70}) \div 2] \times 1000 \div 10$$

where P_{70} = 1970 population, and P_{80} = 1980 population.

Note that division by 10 annualizes the change over the 10 year period.

- 2) Rate of Natural Increase =

$$(B - D) \div [(P_{80} + P_{70}) \div 2] \times 1000 \div 10$$

where B and D are births and deaths in the 1970-1980 period.

3) Rate of Net Migration =

$$M + [(P_{80} + P_{70}) \div 2] \times 1000 \div 10$$

$$\text{where } M = (P_{80} - P_{70}) - (B - D).$$

Undercount in the census introduces errors into the rates of demographic changes. Enumeration differences between the two censuses can vitiate the measurement of total change, and consequently of net migration, which is obtained as the residual after making allowance for natural increase. Detailed studies conducted by the Bureau of the Census indicate that underenumeration in 1970 was negligible in Wisconsin despite an estimated undercount of 2.5 percent for the total population of the United States.¹ In 1980, the Bureau appears to have made a better enumeration of the whole United States.² It is reasonable to assume that the 1980 enumeration in Wisconsin was as good as in 1970. In short, the present study assumes that no serious problem of census count exists in Wisconsin and that the analysis of changes over the 10-year period is not distorted because of enumeration deficiencies.

Annexations in the intervening period also can affect the analysis of population change over time. The 1970 and 1980 population counts are for the land area extant at the respective dates. Net migration should be measured by subtracting the annexed population as well as the amount of natural increase from the total population change. Otherwise, the annexed population assumes the character of immigration, improperly increasing the measure of net immigration or decreasing net outmigration. The reverse is true in

the case of detached populations. No allowance is made for annexations or detachments in this analysis. The results presented here are subject to this limitation. However, the main findings of the paper are not affected; they are only less strongly stated because of the limitation. In a follow-up study, the authors propose to take account of annexations and introduce the necessary adjustment in the measure of net migration.

This analysis is undertaken for the urban and rural communities in two separate groups of Wisconsin counties -- metropolitan and nonmetropolitan counties. A Standard Metropolitan Statistical Area (SMSA) is a county or group of contiguous counties with at least one large city which, together with thickly settled adjacent territory (incorporated and unincorporated), has at least 50,000 residents. Peripheral counties are included if they are predominantly nonagricultural in nature, and are socially and economically integrated into the central counties.

According to the 1980 census, Wisconsin has 19 counties placed in 12 different SMSAs. There are 8 one-county SMSAs: Green Bay (Brown County), Janesville-Beloit (Rock County), Kenosha, La Crosse, Madison (Dane County), Racine, Sheboygan, and Wausau (Marathon County). The Eau Claire SMSA contains two counties: Eau Claire and Chippewa; the Appleton-Oshkosh SMSA has three counties: Calumet, Outagamie and Winnebago; and Milwaukee SMSA includes four: Milwaukee, Ozaukee, Washington and Waukesha. Finally, Douglas County forms part of the interstate Duluth-Superior SMSA and St. Croix County is a part of the interstate Minneapolis-St. Paul SMSA.

According to the Census Bureau definition, the urban population includes all persons living in urbanized areas (UA) plus all persons in places of 2,500 or more inhabitants outside of UAs. An urbanized area is a population concentration of at least 50,000 persons with a general density of 1,000 persons per square mile. Generally, a UA is a central city plus the surrounding closely settled area (suburbs). The rural population consists of everyone not included in the urban category.

Data on births and deaths in the entire 10-year period between 1970 and 1980 are available for all counties and for 144 incorporated places with 2,500 persons or more in 1970.³ The only other place for which vital statistics could be obtained is River Hills Village (Milwaukee County) with a population of 1,561 in 1970. River Hills Village data are available because all minor civil divisions (MCDs) in Milwaukee County except the Village of River Hills had more than 2,500 residents. Data on births and deaths were consequently available for all MCDs in Milwaukee county except River Hills, thus enabling a determination of the vital statistics for River Hills by subtracting the births and deaths for the rest from the Milwaukee County totals.

While distributing urban places by population size and by metropolitan/nonmetropolitan location, four incorporated places that cut across metropolitan-nonmetropolitan boundaries are entirely placed in the nonmetropolitan county group. In each case a larger proportion of the population lives outside the metropolitan county boundaries. The four places and their respective 1970 populations

are: (1) City of Marshfield with 15,560 persons in Wood County and 59 in Marathon, (2) City of Kiel with 2,550 residents in Manitowoc County, and 298 in Calumet, (3) City of New London with 4,433 people in Waupaca County and 1,368 in Outagamie, and (4) City of River Falls with 6,247 persons in Pierce County and 991 in St. Croix.

Rates of natural increase, net migration and total population change are calculated for the metropolitan and nonmetropolitan county populations as well as for each of the 145 cities and villages for which data on births and deaths are separately available. Similar rates are also calculated for four categories of urban communities for which vital statistics are available. This is done for the metropolitan and nonmetropolitan counties separately. The four categories of urban communities used for this particular purpose are: (1) 50,000 persons or more, (2) 15,000 to 49,999, (3) 7,500 to 14,999, and (4) less than 7,500. The 1970 population was used to categorize all communities.

The total population of the remaining MCDs in the metropolitan and nonmetropolitan areas is examined in three categories: (1) entirely urban units, (2) partly urban and partly rural units, and (3) entirely rural units. Note that partly urban and partly rural MCDs are found near large cities. The partly urban portion ("urban fringe") consists of a dense settlement just outside and indistinguishable from the city itself. Both categories 1 and 2 include areas recently admitted to the urban domain. Data on births and deaths in the 1970s are not available for the MCDs in any of

these three categories. The components of population change are estimated for their group totals.

When no vital statistics data are available, the amount of natural increase in a population is determined by subtracting the known portion (compiled for the 145 urban places referred above) from the total. This is calculated for the metropolitan and nonmetropolitan areas separately.⁴ The rates of natural increase (when vital statistics are not available) are then determined using equation 2. Within the metropolitan or nonmetropolitan sector, the rate of natural increase is assumed to be the same for different population groups lacking data on births and deaths as for such groups together. The amount of natural increase is estimated by applying the rate to the average of the 1970 and 1980 population in the respective categories. Finally, the rate and amount of net migration is obtained as the residual. Consideration of the age-sex distribution of the population probably would have yielded better estimates of natural increase. However, the overall results are not likely to have been quite different. Within the metropolitan sector, the rates of natural increase are not seen to vary widely over the entire spectrum of different groups of MCDs, signifying the reasonableness of the rates estimated for the unknown categories. In the nonmetropolitan sector, the variation in natural increase rates is wider, but the level in general is lower, indicating that the rates estimated for the unknown cases may not be very much off from the true rates after all. In any case, it should be noted that rates of natural increase make only a limited difference in the

growth rate of the population of sub-state area groups. In short, the overall level and direction of net migration indicated in this study appear reasonable, despite the reliance on estimates in some cases.

FOOTNOTES

1. Current Population Reports, Series P-25, No. 701 (May 1977), p. 137. Actually the results showed a small overcount for Wisconsin. The Bureau discounted this result as not probable for an entire state and concluded that any undercount in Wisconsin was negligible in 1970.

See also Current Population Reports, Series P-23, No. 56 (August 1975), p. 6. The results of the 1970 Census - CPS Match Study are reported in this study. The omission rate for the North Central region of the United States was placed by this study at 1.1 percent. It is reasonable to assume that the underenumeration rate was much higher for Michigan and Illinois which contain large metropolises like Detroit and Chicago. Consequently, the rate for Wisconsin had to be very low, if any.

2. For example, the total United States undercount for blacks in 1980 is placed between 4.5 and 5.5 percent, compared to the 7.7 percent black undercount in the 1970 census. See Intercom, Vol. 9, No. 3 (March 1981), p. 7.
3. Until recently, the Wisconsin Department of Health and Social Services tabulated vital statistics data only for incorporated places of 2,500 persons or more.
4. For this purpose, the relevant parts of places that cut across metropolitan-nonmetropolitan boundaries were appropriately included according to their location in the metropolitan or nonmetropolitan counties.

Table 1: Average Annual Rates¹ of Natural Increase,² Net Migration³ and Total Population Change in Wisconsin Metropolitan⁴ and Non-metropolitan Municipalities Grouped by 1970 Population Size⁵: 1970-1980
(rates are per 1,000 population per year)

Metropolitan/Non-metropolitan Location and Population Size in 1970	Total Population		Numeric Change 1970-1980			Annual Average Rates 1970-1980		
	1970	1980	Natural Increase	Net Migration	Total Change	Natural Increase	Net Migration	Total Change
Metropolitan								
50,000 and over	1,441,027	1,330,331	85,790	-196,486	-110,696	6.2	-14.2	-8.0
15,000 to 49,999	527,687	552,827	34,404	-9,264	25,140	6.4	-1.7	4.7
7,500 to 14,999 (with vital statistics)	207,700	231,191	14,485	9,006	23,491	6.6	4.1	10.7
Less than 7,500 (with vital statistics)	149,185	180,106	12,404	18,517	30,921	7.5	11.3	18.8
Urban Municipalities (without vital statistics) ⁶	72,053	92,024	6,885 (E)	13,086 (E)	19,971	8.4 (E)	15.9 (E)	24.3
Subtotal ⁵	2,400,368	2,389,912	154,034 (E)	-164,490 (E)	-10,456	6.4 (E)	-6.8 (E)	-0.4
Partly Urban/Partly Rural Municipalities ⁶	218,156	268,822	20,367 (E)	30,299 (E)	50,666 (E)	8.4 (E)	12.4 (E)	20.8
Entirely Rural Municipalities ⁶	400,081	485,922	37,056 (E)	48,785 (E)	85,841 (E)	8.4 (E)	11.0 (E)	19.4
Grand Total	3,018,605	3,144,656	211,457	-85,406	126,051	6.9	-2.8	4.1
Non-Metropolitan								
50,000 and over	0	0	0	0	0	--	--	--
15,000 to 49,999	142,313	145,778	5,746	-2,281	3,465	4.0	-1.6	2.4
7,500 to 14,999	151,298	152,477	2,837	-1,658	1,179	1.9	-1.1	0.8
Less than 7,500 (with vital statistics)	178,549	191,963	1,860	11,554	13,414	1.0	6.2	7.2
Urban Municipalities (without vital statistics) ⁶	16,944	20,847	1,054 (E)	2,849 (E)	3,903	5.6 (E)	15.1 (E)	20.7
Subtotal ⁵	486,365	507,632	11,431 (E)	9,813 (E)	21,244	2.3 (E)	2.0 (E)	4.3
Partly Urban/Partly Rural Municipalities ⁶	0	0	0	0	0	--	--	--
Entirely Rural Municipalities ⁶	912,828	1,053,233	54,853 (E)	85,552 (E)	140,405	5.6 (E)	8.7 (E)	14.3
Grand Total	1,399,216	1,560,865	66,284	95,365	161,649	4.5	6.4	10.9

Table 1, continued

Metropolitan/Non-metropolitan Location and Population Size in 1970	Total Population		Numeric Change 1970-1980			Annual Average Rates 1970-1980		
	1970	1980	Natural Increase	Net Migration	Total Change	Natural Increase	Net Migration	Total Change
<u>State Total</u>								
50,000 and over	1,441,027	1,330,331	85,790	-196,486	-110,696	6.2	-14.2	-8.0
15,000 to 49,999	670,000	698,605	40,150	-11,545	28,605	5.9	-1.7	4.2
7,500 to 14,999 (with vital statistics)	358,998	383,668	17,322	7,348	24,670	4.6	2.0	6.6
Less than 7,500 (with vital statistics)	327,734	372,069	14,264	30,071	44,335	4.1	8.6	12.7
Urban Municipalities (without vital statistics) ⁶	88,997	112,871	7,939 (E)	15,935 (E)	23,874	7.9 (E)	15.8 (E)	23.7
Subtotal	2,886,756	2,897,544	165,465 (E)	-154,677 (E)	10,788	5.7 (E)	-5.3 (E)	0.4
Partly Urban/Partly Rural Municipalities ⁶	218,156	268,822	20,367 (E)	30,299 (E)	50,666	8.4 (E)	12.4 (E)	20.8
Entirely Rural Municipalities ⁶	1,312,909	1,539,155	91,909 (E)	134,337 (E)	226,246	6.5 (E)	9.4 (E)	15.9
Grand Total	4,417,821	4,705,521	277,741	9,959	287,700	6.1	0.2	6.3

Notes:

1. Rates are derived with the average of the initial and the terminal population as the base.
2. Three-fourths of the births and deaths in 1970 and one-fourth of those in 1980 along with all births and deaths during the intervening years are used to calculate natural increase. Births and deaths data for 1980 are preliminary. For data pertaining to individual places and counties, see Balkrishna D. Kale and Robert K. Naylor, "Components of Population Change for Urban Places in Wisconsin: 1970-1980", Document issued by Demographic Services Center of the Wisconsin Department of Administration.
3. Net migration is obtained as a residual amount, i.e., by subtracting natural increase from total change.
4. Wisconsin has 19 counties placed in 12 different Standard Metropolitan Statistical Areas according to the 1980 Census. See the Appendix for details.
5. While distributing municipalities by population size and metropolitan/non-metropolitan location, four urban municipalities that cut across metropolitan/non-metropolitan boundaries are entirely placed in the non-metropolitan group. A larger proportion of the population in each case lives outside the metropolitan county boundaries. However, the metropolitan/non-metropolitan grand totals and the subtotals of entirely urban municipalities includes only the relevant parts. For details see the Appendix.
6. The method of estimating natural increase and net migration for municipalities which lacked data on births and deaths is described in the Appendix. For this purpose, within the metropolitan or non-metropolitan sector as a whole, the rate of natural increase was assumed to be the same for different municipality groups without vital statistics. Urban municipalities without vital statistics and partly urban/partly rural municipalities are listed along with their population data in Kale and Naylor, "Components of Population Change for Urban Places in Wisconsin: 1970-1980." Estimated natural increase and net migration are denoted by (E) in the above table.

Table 2: Distribution of Wisconsin Cities and Villages with Over 2,500 Persons Each in 1970 by Population Size in 1970 and Annual Average Rates of Natural Increase, Net Migration and Total Change in the 1970s

Annual Average Rate per 1,000 Persons per Year	Less Than 5,000	5,000 - 7,499	7,500 - 9,999	10,000 - 14,999	15,000 - 24,999	25,000 - 49,999	50,000 and over	Total
<u>Natural Increase</u>								
Less than 0.00	16	4	2	1	0	0	1	24
0.00 to 2.49	15	7	6	3	1	1	2	35
2.50 to 4.99	4	3	5	5	4	6	1	28
5.00 to 7.49	6	3	0	2	3	1	4	19
7.50 to 9.99	2	4	1	5	3	3	2	20
10.00 and over	11	2	3	1	1	1	0	19
Median Rate	2.04	3.06	2.98	4.91	6.54	4.36	6.43	3.84
<u>Net Migration</u>								
Less than -10.00	3	1	1	1	3	3	4	16
-5.01 to -10.00	2	0	2	7	4	0	5	20
-0.01 to -5.00	7	7	6	2	0	4	1	27
0.00 to 4.99	13	6	3	1	1	2	0	26
5.00 to 9.99	15	1	2	2	1	2	0	23
10.00 and over	14	8	3	4	3	1	0	33
Median Rate	5.12	3.28	-0.78	-3.07	-6.91	-3.60	-8.41	1.54
<u>Total Change</u>								
Less than -10.00	2	0	0	1	3	1	4	11
-5.01 to -10.00	4	1	2	1	1	1	1	11
-0.01 to -5.00	7	2	5	6	3	4	3	30
0.00 to 4.99	8	5	4	3	0	1	2	23
5.00 to 9.99	14	6	1	0	0	2	0	23
10.00 and over	19	9	5	6	5	3	0	47
Median Rate	5.13	7.34	0.95	0.02	-2.13	0.08	-5.34	4.57
Number of Communities	54	23	17	17	12	12	10	145

Note: Data on births and deaths could be determined for the Village of River Hills (Milwaukee County), although it had only 1,561 persons in 1970. Population and vital statistics data for individual cities and villages included in this table are presented in Kale and Naylor, "Components of Population Change for Urban Places in Wisconsin: 1970-1980". Document issued by the Demographic Services Center of the Wisconsin Department of Administration. Also see footnotes 1, 2 and 3 to Table 1.

Table 3: Distribution of Wisconsin Cities and Villages with 2,500 Persons or More in 1970 by Metropolitan/Non-Metropolitan County of Location, Population Size in 1970 and Gainers/Losers in Migration Process in the 1970s

(figures in parentheses are percentages of row totals)

Location and Population Size in 1970	Net Migration Experience		Total
	Gainers	Losers	
<u>Metropolitan</u>			
50,000 and over	0 (0.0)	10 (100.0)	10
15,000 to 49,999	8 (44.4)	10 (55.6)	18
7,500 to 14,999	10 (52.6)	9 (47.4)	19
Less than 7,500	26 (72.2)	10 (27.8)	36
All Categories	44 (53.0)	39 (47.0)	83
<u>Non-Metropolitan</u>			
50,000 and over	-----	-----	0
15,000 to 49,999	2 (33.3)	4 (66.7)	6
7,500 to 14,999	5 (33.3)	10 (66.7)	15
Less than 7,500	31 (75.6)	10 (24.4)	41
All Categories	38 (61.3)	24 (38.7)	62
<u>State Totals</u>			
50,000 and over	0 (0.0)	10 (100.0)	10
15,000 to 49,999	10 (41.7)	14 (58.3)	24
7,500 to 14,999	15 (44.1)	19 (55.9)	34
Less than 7,500	57 (74.0)	20 (26.0)	77
All Categories	82 (56.6)	63 (43.4)	145

Note: See footnotes to Tables 1 and 2.

BIRTHS AND DEATHS:
PAST AND FUTURE

Henry Krebs
Bureau of Health Statistics
Wisconsin Department of Health and Social Services

The fertility event of the generation was the baby boom of 1947 to 1966 and the ensuing "birth dearth." Together they have deformed the age-distribution of the population in ways that we are only beginning to understand or pay for. The second revolutionary event was the decline in the mortality of the aged. Both of these events were unanticipated. In 1964, just before mortality declined, a National Center for Health Statistics article concluded that the United States was close to a limit, anticipating very little improvement in age-specific mortality (Public Health Service, 1964). And in 1947, the first year of the baby boom, the most eminent demographer of the era made projections to 1975 which completely missed the baby boom (Whelpton, 1947). These two events can be dealt with together: both of them have elements of joy and pleasure about them, and both have social price tags that may be very significant, particularly in the long run. Both require some historical background to understand.

Fertility

For most of man's domain on earth the fertility experience has been what demographers call natural fertility, that is, fertility unrestrained by any control. Some natural fertility persisted into

our times: the Hutterite communities of North America in the 1920s experienced an average of 11 births per married woman (Tietze, 1957). Natural fertility began to decline gradually in the United States and western Europe in the early 19th century. By the middle of the Depression in the 1930s, fertility had declined to the point where women of child-bearing age were not replacing themselves for the next generation. Fertility increased very slightly just before World War II and then in 1947 the aberration began.

Depending on the definition used for "expected" number of births and depending somewhat on the selected end point of the baby boom, Wisconsin had anywhere from 500,000 to 700,000 births in excess of expected fertility during the entire baby boom. It is surprising that at the peak of the baby boom (1960) the population of child-bearing age women was no bigger than it had been in 1950, and little more than in 1940. In fact, the population of women in their twenties, where most of the child-bearing was taking place, was actually 37,000 fewer in 1960 than in 1940. So it was not simply more women having the same number of children, it was a small cohort of women having a lot more children. The birth rate decline after 1960 was reasonably gradual for several years, while the contraceptive revolution was diffusing through the population. The decline became very rapid during the early 1970s, reaching a low in 1973 of 63,000 births in Wisconsin. This compares to 100,000 births in 1960. Since 1973 the number of births has been edging up 1,000 or so per year; I estimate about 75,000 births will occur in 1982. The total fertility rate, which summarizes the period fertility of

women, continued to decline until 1977, when it reached 1.7 births per woman of child-bearing age.

Mortality

Mortality rates also were declining through the 19th century, but very gradually and certainly not very steadily. In 1875, William Farr, the Registrar General of the United Kingdom, looked back over a 34 year period to see whether he needed to construct a new life table for his analysis of British mortality (Farr, 1875). He found that the age-specific death rates over that period had changed so little on the average that he did not need to construct a new life table. In other words, for a whole generation or more the mortality rates in this advanced country were virtually unchanged.

After the turn of the century the decline in mortality rates became much more rapid. Most of the changes in mortality rates were reductions in causes of death that affect the young -- the infectious and parasitic diseases. Most of the lives saved were infants and children and, because of tuberculosis, young women. The infant mortality rate declined from 109 deaths per 1,000 live births in 1910 to 25 per 1,000 in 1960. The maternal death rate dropped between 1926 and 1950 from 605 deaths per 100,000 births to 42.5 per 100,000. Fries (1980) estimates that in the first 80 years of this century, setting violent causes aside, we have cured 98 percent of the mortality due to acute causes of death. However, this benefit redounded principally to the young. Between 1900 and 1960, the expectation of life at birth increased by 19 years for males and 23

years for females. Expectation of life at age 65 increased only 1.5 years for men and 3.6 years for women. Only eight percent of the improvement accrued to the aged for males, and sixteen percent for females. Then we reached a plateau for about 15 years, the age-specific death rates improving just enough to compensate for the gradual aging of the population. The crude death rate was steady at nine to ten per 1,000 population from 1948 to 1967.

In the late 1960s the second major mortality event began to take place. The new decline has been attributed to changes in life style, improved treatment modalities, and the provision of medical care for those who could not afford it through Medicare or Medicaid; I will not argue with this. What is significant is that the improvement has been in mortality rates of the aged. The earlier 60 year period saw only eight and sixteen percent of the improvement redounded to aged males and females. Now 27 percent of the increased expectation of life at birth redounded to 65 year and older males and 69 percent to aged females.

The Future

Four facts are reasonably clear and relevant to future fertility.

1) We now have a perfectly huge population of women of child-bearing age, 50 percent larger than in 1960. Their fertility potential is frightening. If we were to apply 1960 age-specific fertility rates to the population currently at risk we would have 195,000 as opposed to 75,000 births in one year. The population at risk will begin to decline in this decade; it will begin to decline

at youngest ages first. Since young women bear most of the children, the effect of this change should be immediate.

2) Fertility rates are extraordinarily low, about 15 percent below replacement level at this point, meaning that the next generation of child-bearing age women would be 85 percent the size of the current generation if this continues.

3) The expectation of women for their completed fertility is now above their actual performance. There is some potential for increased fertility in order to meet their own expectations. But their expectations average out to just about replacement level, so we are not going to see the total fertility rates of the baby boom.

4) We have now achieved nearly perfect fertility control with very effective contraception, supplemented by legal abortion. The need to bear unwanted children has virtually disappeared.

Experts on the future of fertility fall into about two-and-one-half schools of thought. One can be characterized as the Easterlin school after Richard Easterlin, University of Pennsylvania. His hypothesis is that fertility is inversely related to cohort size (Easterlin, 1980). When large cohorts enter child-bearing age, they confront more intense job competition, poorer income prospects, and crowded promotion ladders, hence contracting their fertility intentions; conversely, smaller cohorts encounter more salubrious prospects and can be expected to enlarge their fertility intentions.

The second school can perhaps be named in honor of Charles Westoff of Princeton, since he and Easterlin square off in these matters. Westoff (1983) contends that socio-cultural changes which brought about current low levels of fertility are so profoundly imbedded in our culture and society that they are simply not going to go away.

French demographer Bougeois-Pichat (1981) recently surveyed the demographic changes in Western Europe. He suggests that there has been such a fundamental change in the reality of the influences that control fertility that we don't know enough to ask the right questions. He suggests that we need to change our thought and methodology, in ways comparable to the change in physics when it was realized that we live in a probabilistic world and that there is a field effect as well as a corpuscular effect. That is not much help to those who have to make projections about fertility but on the whole it may be a realistic reading of what we must do to understand these events.

The future of mortality presents its own puzzlements. There is still room for improvement in infant mortality, despite everything we have done. We know that in some significant groups infant mortality is higher than need be. Changes are likely to come about through the further improvement of prenatal care, the intensive care of high risk mothers, and sharper targeting of high-risk groups.

Violence is the major cause of death for persons aged 1-34. We have not successfully dealt with violence as a cause of death.

Mortality at age 45 and over is primarily due to chronic diseases. In the case of cardiovascular disease, we are beginning to affect the age of onset and perhaps the age of disability. How much is this going to extend our expectation of life? The natural life span of man seems to have an immovable limit (Fries, 1980). We may be postponing death, compressing mortality toward the natural limit -- whether it turns out to be 90, 95 or 100 years.

Let me now tell you what others are using as projection base lines. Several years ago the Office of the Actuary of the Social Security Administration made some projections to the year 2080 (Bayo, 1980). I looked at their projections to the year 2020.

The SSA made three fertility and three mortality assumptions. For fertility their high assumption was 2.5 births per woman, which is about 18 percent above replacement level; their middle assumption was 2.1 births which is replacement level; and low was 1.5 per woman which is 29 percent below replacement. Fertility of 1.5 births has been achieved in some European countries but has not yet been seen on this continent. Of the SSA mortality assumptions, the most conservative was an 11 percent reduction of the 1980 age-standardized rates for males and 15 percent for females. Their middle reduction was 22 percent for males and 29 percent for females; their third was a 40 percent reduction for males and 50 percent for females. Do the various assumptions make any difference in Social Security's projections? Their Alternative I (higher fertility and mortality) produces an annual increase in population of 2,248,000 in the year 2000 and a total population of 279

million. Alternative III (low fertility and very low mortality) produces an annual increase of only 1,052,000 and a total of 265 million. The assumed fertility difference overwhelms the effect of the mortality difference.

We have reviewed the recent history of fertility and mortality dynamics to discover how we have arrived here and to suggest clues to what may be ahead.

We have seen the gradual decline over the course of a century from "natural" fertility to below "replacement" level, interrupted by a twenty year hiatus we call the "baby boom." We have seen the gradual improvement in survival from an expected life span at birth of perhaps 25 to 30 years during the late 18th century to the mid-seventies expected today, but with the suggestion that we are approaching a natural limit (Keyfitz, 1978). Thus, as always, the future presents us with uncertainty.

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APPENDIX

Demographic Change in Wisconsin: Trends and Outlook

May 26, 1982
Madison, Wisconsin

Program

- 8:45 am Introduction
Donald G. Holl, Demographic Services Center, Wisconsin Department
of Administration
- 9:00 DEMOGRAPHIC TRENDS IN WISCONSIN: FIRST FINDINGS OF THE 1980 CENSUS
- Births, Deaths and Migration: Population Change in Local Areas
Balkrishna D. Kale, Demographic Services Center, Wisconsin
Department of Administration
- Living Arrangements: 1980 Census Reveals Changes in the Way We Live
Cynthia Bautista, Department of Rural Sociology, University of
Wisconsin-Madison
- Housing Wisconsin's Population: Three Decades of Change
Paul R. Voss, Applied Population Laboratory, University of
Wisconsin-Madison/Extension; Patricia Guhleman, Department of Rural
Sociology, University of Wisconsin-Madison
- Reaction and Discussion
Halliman Winsborough, Center for Demography and Ecology, University
of Wisconsin-Madison
- 1:00 pm WISCONSIN'S POPULATION FUTURE: FORECASTING DEMOGRAPHIC CHANGE
- County Population Change: the Critical Role of Migration
Stephen J. Tordella, Applied Population Laboratory, University of
Wisconsin-Madison/Extension
- Births and Deaths: the Past and the Future
Henry Krebs, Bureau of Health Statistics, Wisconsin Department of
Health and Social Services
- Wisconsin County Population Projections: What Are the Plans?
Balkrishna D. Kale
- Reaction and Discussion
Halliman Winsborough

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